SEARCH REQUEST FORM

NVTOL

Scientific and Technical Information Center

Requester's Full Name: Sabiha Qazi Examiner #: 74141 Date: 5/27/04

Art Unit: 1616 Phone Number: 30-20622 Serial Number: 10/601,253

Mail Box and Bldg/Room Location: 4C20, Rem, 4A45 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need. MG

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Rapidly disintegrating formulation for treatment or prevention of Mucositis.

Inventors (please provide full names): LAWTER, JAMES

Earliest Priority Filing Date: 6/20/2002 FD 6/20/2003

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for a tetracycline composition + preparation to a solid dosage form cls 1-17,

cl 18 - Method of treatment or prevention for Mucositis

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Lin	NA Sequence (#)	STN ✓
Searcher Phone #: 22504	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up: 5/29	Bibliographic ✓	Dr.Link
Date Completed: 5/29	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time: 10	Patent Family	WWW/Internet
Online Time: 465	Other	Other (specify)

PTO-1590 (8-01)

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 14:31:38 ON 29 MAY 2004
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 29 May 2004  VOL 140 ISS 23
FILE LAST UPDATED: 28 May 2004  (20040528/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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L12  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:331913  HCAPLUS
DN   140:327130
ED   Entered STN:  23 Apr 2004
TI   Mucoadhesive tetracycline formulations
IN   Lawter, James Ronald
PA   Orapharma, Inc., USA
SO   PCT Int. Appl., 25 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K
CC   63-6 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
PI   WO 2004032843     A2    20040422       WO 2003-US31479  20031006
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-416742P   P     20021007
AB   Mucositis is treated and/or prevented by administrating to a patient a
     formulation containing a tetracycline and at least one cationic
     polymer and/or mucoadhesive material.  The tetracycline may be
     in the form of a salt or a base.  The formulations may optionally also
     contain an antifungal agent to prevent fungal overgrowth due to reduction in
     the normal oral flora by the tetracycline.  The formulation can
     be formed into liquid or solid dosage forms such as mouth rinse or tablet.
     Such compns. have the advantage of prolonged retention of the
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tetracycline in the mucosa of the oral cavity. A suspension of meclocycline sulfosalicylate is formed by addition of micronized drug to an aqueous solution containing 0.5% gellan gum and methyl- and propylparaben as antimicrobial preservatives.

ST mucoadhesive **tetracycline** formulation

IT Polyelectrolytes
(cationic; mucoadhesive **tetracycline** formulations)

IT Drug delivery systems
(controlled-release; mucoadhesive **tetracycline** formulations)

IT Mucous membrane
(disease, inflammation; mucoadhesive **tetracycline** formulations)

IT Fungicides
Human
Mouthwashes
Mycosis
(mucoadhesive **tetracycline** formulations)

IT Gelatins, biological studies
Polyamines
Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucoadhesive **tetracycline** formulations)

IT Mouth
(mucosa; mucoadhesive **tetracycline** formulations)

IT Drug delivery systems
(mucosal; mucoadhesive **tetracycline** formulations)

IT Drug delivery systems
(suspensions; mucoadhesive **tetracycline** formulations)

IT Drug delivery systems
(tablets; mucoadhesive **tetracycline** formulations)

IT Dissolution
Dissolution rate
(vmucoadhesive **tetracycline** formulations)

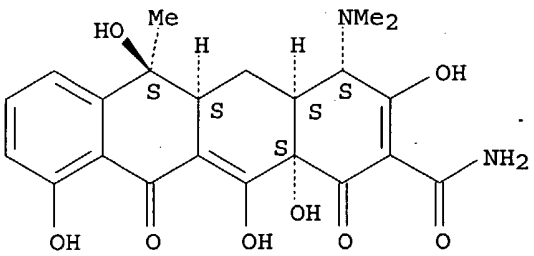
IT **60-54-8**, **Tetracycline 2013-58-3**, Meclocycline
9012-76-4, Chitosan **38324-29-7 73816-42-9**,
Meclocycline Sulfosalicylate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucoadhesive **tetracycline** formulations)

IT **60-54-8**, **Tetracycline 2013-58-3**, Meclocycline
38324-29-7 73816-42-9, Meclocycline Sulfosalicylate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucoadhesive **tetracycline** formulations)

RN 60-54-8 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

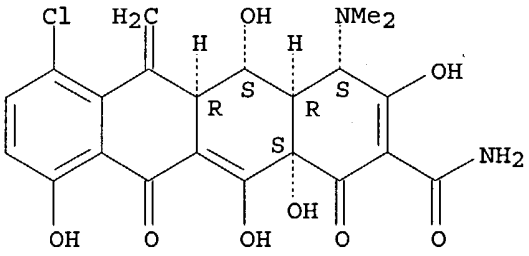


RN 2013-58-3 HCAPLUS

CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-,

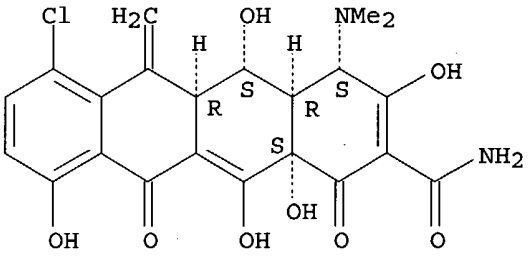
(4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 38324-29-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, monohydrochloride, (4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



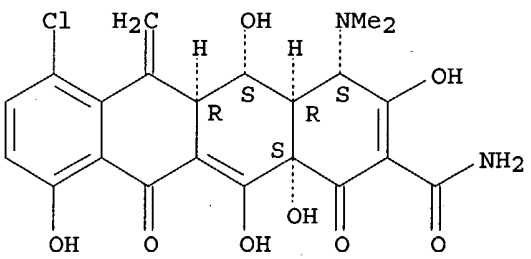
● HCl

RN 73816-42-9 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-sulfo-, compd. with (4S,4aR,5S,5aR,12aS)-7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-2-naphthacenecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

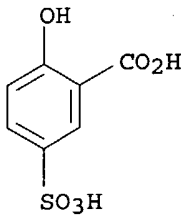
CRN 2013-58-3
CMF C22 H21 Cl N2 O8

Absolute stereochemistry.



CM 2

CRN 97-05-2
CMF C7 H6 O6 S



L12 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:2630 HCAPLUS
DN 140:65188
ED Entered STN: 02 Jan 2004
TI Rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis
IN **Lawter, J. Ronald**
PA **Orapharma, Inc., USA**
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004000223	A2	20031231	WO 2003-US19686	20030620 <--
WO 2004000223	A3	20040408		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004029843	A1	20040212	US 2003-601259	20030620 <--
PRAI US 2002-390068P	P	20020620 <--		
US 2002-407730P	P	20020903 <--		

AB Mucositis is treated and/or prevented by administrating to a patient a rapidly disintegrating solid dosage form comprising a **tetracycline**. The dosage form may contain another agent such as an NSAID, an inflammatory cytokine inhibitor, a mast cell inhibitor, an MMP inhibitor, an NO inhibitor, or a mixture thereof. The dosage forms may optionally also contain an antifungal agent to prevent fungal overgrowth due to reduction in the normal oral flora by the **tetracycline.** The **tetracycline** is preferably one that is poorly absorbed from the gastrointestinal tract. Such compns. have the advantage of treating the entire gastrointestinal tract since the active ingredient is not removed from the tract via absorption. Further, such compns. minimize systemic exposure and accompanying side effects. The compns. can be formulated as solid dosage forms comprising a **tetracycline** which disintegrates

in an aqueous medium or saliva within in a short period, for example, two minutes. The dosage form can be, for example, a hard, compressed tablet adapted to rapidly disintegrate in saliva or an aqueous vehicle or a table prepared by freeze-drying a solution or suspension of the active ingredients. Freeze-dried and micronized meclocycline gellan gum formulations were prepared along with other meclocycline formulations.

ST **tetracycline** rapidly disintegrating oral formulation mucositis

IT Drug delivery systems
(granules; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inflammatory, inhibitors; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(microspheres; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(mouthrinses; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Anti-inflammatory agents
(nonsteroidal; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(oral; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(pellets; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(powders; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Fungicides
Mouthwashes
(rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Mouth, disease
(stomatitis; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(suspensions; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT Drug delivery systems
(tablets; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT 10102-43-9, Nitric oxide, biological studies 141907-41-7, Matrix metalloproteinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT 71010-52-1, Gellan gum
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

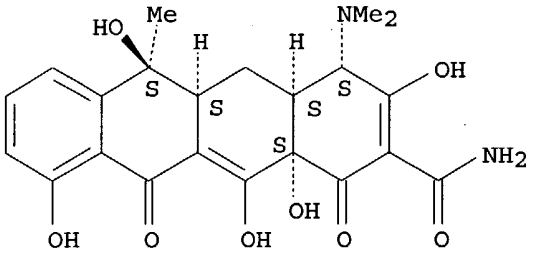
IT **60-54-8**, **Tetracycline 64-75-5**, **Tetracycline** hydrochloride **2013-58-3**, Meclocycline **73816-42-9**, Meclocycline sulfosalicylate
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

IT **60-54-8**, **Tetracycline 64-75-5**,

Tetracycline hydrochloride **2013-58-3**, Meclocycline
73816-42-9, Meclocycline sulfosalicylate
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rapidly disintegrating formulations containing **tetracyclines** for treating or preventing mucositis)

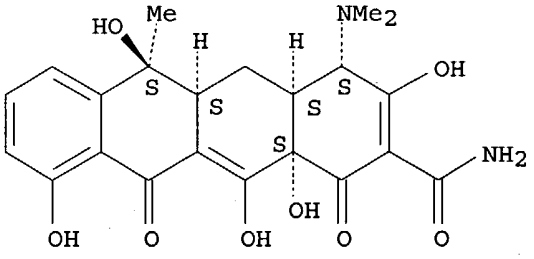
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-75-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

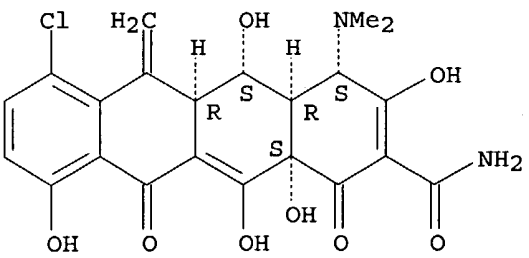
Absolute stereochemistry. Rotation (-).



● HCl

RN 2013-58-3 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, (4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

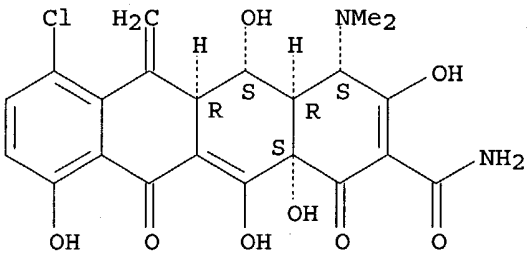


RN 73816-42-9 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-sulfo-, compd. with (4S,4aR,5S,5aR,12aS)-7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-2-naphthacenecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

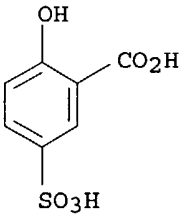
CRN 2013-58-3
CMF C22 H21 Cl N2 O8

Absolute stereochemistry.



CM 2

CRN 97-05-2
CMF C7 H6 O6 S



L12 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:208102 · HCAPLUS
DN 134:242676
ED Entered STN: 22 Mar 2001
TI **Tetracycline** formulations for treating or preventing mucositis
IN **Lawter, James Ronald**; Comiskey, Stephen J.
PA **Orapharma, Inc., USA**
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 62
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001019362	A2	20010322	WO 2000-US40907	20000914
	WO 2001019362	A3	20011213		

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HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1212050 A2 20020612 EP 2000-974107 20000914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003509367 T2 20030311 JP 2001-522996 20000914
US 2002035096 A1 20020321 US 2001-815762 20010323
US 6683067 B2 20040127
US 2002045604 A1 20020418 US 2001-7197 20011204
PRAI US 1999-153892P P 19990914
US 2000-661836 A3 20000914
WO 2000-US40907 W 20000914
OS MARPAT 134:242676
AB Mucositis is treated and/or prevented by administrating to a patient a formulation comprising a **tetracycline** that is poorly absorbed from the gastro-intestinal tract. The **tetracycline** may be in the form of a pharmaceutically acceptable salt or a base. The formulations may optionally also contain an antifungal agent to prevent fungal overgrowth due to reduction in the normal oral flora by the **tetracycline.** Such compns. have the advantage of treating the entire gastro-intestinal tract since the active ingredient is not removed from the tract via absorption. Further, such compns. minimize systemic exposure and accompanying side effects. For example, a suspension of meclocycline sulfosalicylate was prepared by addition of micronized drug to an aqueous solution containing 0.5% gellan gum and Me and Pr parabens as antimicrobial preservative.
ST oral topical **tetracycline** mucositis
IT Drug delivery systems
(aerosols; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(emulsions; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(gels; **tetracycline** formulations for treating or preventing mucositis)
IT Mucous membrane
(inflammation; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(liposomes; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(lozenges; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(microcapsules; **tetracycline** formulations for treating or preventing mucositis)
IT Mouth
(mucosa, mucositis; **tetracycline** formulations for treating or preventing mucositis)
IT Digestive tract
(mucositis; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(pastes; **tetracycline** formulations for treating or preventing

mucositis)
IT Drug delivery systems
(pellets; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(powders; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(solns.; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(suspensions; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(tablets, effervescent; **tetracycline** formulations for treating or preventing mucositis)
IT Drug delivery systems
(tablets; **tetracycline** formulations for treating or preventing mucositis)
IT Drug bioavailability
Fungicides
Mouthwashes
(**tetracycline** formulations for treating or preventing mucositis)
IT **Tetracyclines**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)
IT Antitumor agents
Radiotherapy
(**tetracycline** formulations for treating or preventing mucositis related to chemo- or radiotherapy)
IT **2013-58-3**, Meclocycline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)
IT **2013-58-3DP**, Meclocycline, calcium complex 7440-70-2DP, Calcium, complex with meclocycline, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)
IT **60-54-8**, **Tetracycline 64-75-5**, **Tetracycline** hydrochloride 7439-95-4D, Magnesium, **tetracycline** complexes, biological studies 7440-70-2D, Calcium, **tetracycline** complexes, biological studies **38324-29-7** **73816-42-9**, Meclocycline sulfosalicylate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)
IT 814-80-2, Calcium lactate
RL: RCT (Reactant); RACT (Reactant or reagent)
(**tetracycline** formulations for treating or preventing mucositis)
IT 71010-52-1, Gellan gum
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

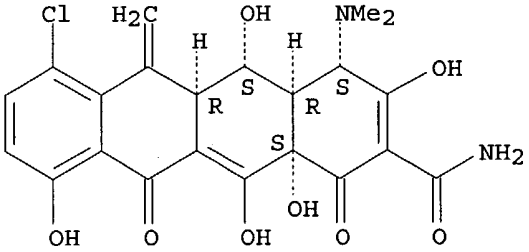
(**tetracycline** formulations for treating or preventing mucositis)

IT **2013-58-3**, Meclocycline
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)

RN 2013-58-3 HCAPLUS

CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, (4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

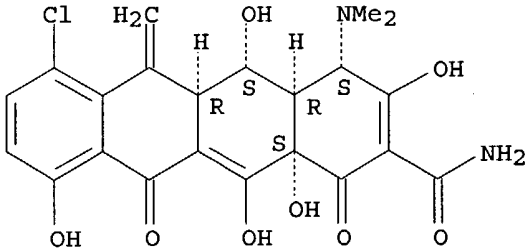


IT **2013-58-3DP**, Meclocycline, calcium complex
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)

RN 2013-58-3 HCAPLUS

CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, (4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

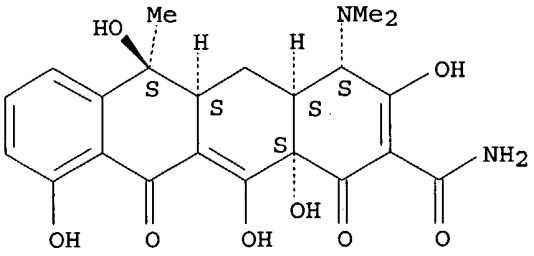


IT **60-54-8**, **Tetracycline 64-75-5**, **Tetracycline** hydrochloride **38324-29-7 73816-42-9**, Meclocycline sulfosalicylate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracycline** formulations for treating or preventing mucositis)

RN 60-54-8 HCAPLUS

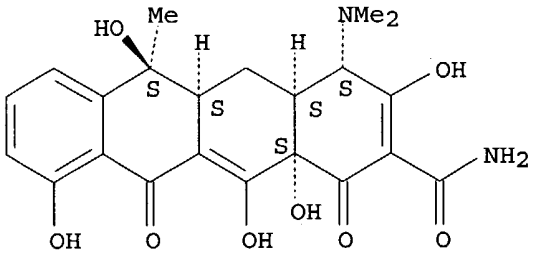
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-75-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

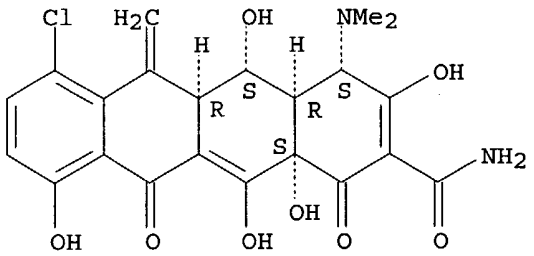
Absolute stereochemistry. Rotation (-).



● HCl

RN 38324-29-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, monohydrochloride, (4S,4aR,5S,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



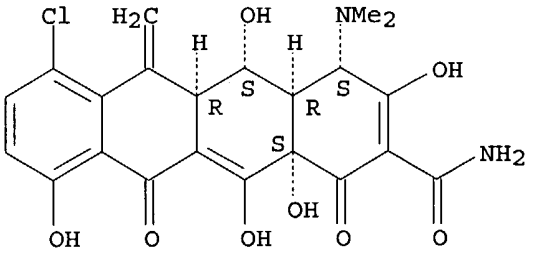
● HCl

RN 73816-42-9 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-sulfo-, compd. with (4S,4aR,5S,5aR,12aS)-7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-2-naphthacenecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

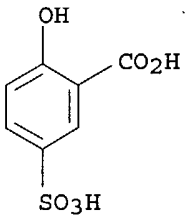
CRN 2013-58-3
CMF C22 H21 Cl N2 O8

Absolute stereochemistry.



CM 2

CRN 97-05-2
CMF C7 H6 O6 S



L12 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:49593 HCAPLUS
DN 114:49593
ED Entered STN: 09 Feb 1991
TI Sustained-release pharmaceutical microparticles for delivery to periodontal pocket
IN **Lawter, James Ronald**; Lanzilotti, Michael Gerard
PA American Cyanamid Co., USA
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K007-16
ICS A61K009-26; A61K009-50; A61K009-52
CC 63-6 (Pharmaceuticals)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 374532	A2	19900627	EP 1989-121887	19891127
	EP 374532	A3	19910807		
	EP 374532	B1	19940921		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	ES 2059683	T3	19941116	ES 1989-121887	19891127
	IL 92699	A1	19940826	IL 1989-92699	19891213
	CA 2006106	AA	19900622	CA 1989-2006106	19891220
	CA 2006106	C	19991026		
	DK 8906559	A	19900623	DK 1989-6559	19891221

	AU 8947078	A1	19900628	AU 1989-47078	19891221
	AU 635913	B2	19930408		
	JP 02212418	A2	19900823	JP 1989-329759	19891221
	JP 2901673	B2	19990607		
	ZA 8909863	A	19901031	ZA 1989-9863	19891221
	US 5500228	A	19960319	US 1990-617382	19901126
PRAI	US 1988-288739	A	19881222		
	US 1987-54372	A2	19870526		

OS MARPAT 114:49593

AB An oral composition for the local administration of a therapeutic agent to the periodontal pocket of a patient for alleviating dental disease as a plurality of dry, discrete microparticles comprises ≥1 therapeutic agent dispersed in a matrix comprising a biocompatible and biodegradable polymer. Minocycline·HCl was added to a solution of poly(glycolide-co-DL-lactide) glycolic acid initiated polymer with inherent viscosity of 0.44 dL/g in CH2Cl2 and dispersed. Polydimethylsiloxane was added to this dispersion and was stirred before it was added to octamethyltetrasiloxane, and stirring was carried out for 2 more hours, then it was dried under vacuum at 40°. The composition was administered to the periodontal pockets created in dogs in an amount of 1 mg of minocycline base/pocket. The mean crevicular fluid levels of minocycline was 10 μg/mL for 14 days.

ST minocycline dental disease

IT Antibiotics
Bactericides, Disinfectants, and Antiseptics
Immunostimulants
Immunosuppressants
Inflammation inhibitors
(pharmaceutical sustained-release microparticles containing polymers and)

IT Anesthetics
Antioxidants
Deodorants
Nutrients
Animal growth regulators
Lipopolysaccharides
Peroxides, biological studies
RL: BIOL (Biological study)
(sustained-release microparticles containing polymers and)

IT Rubber, silicone, biological studies
RL: BIOL (Biological study)
(di-Me, pharmaceutical sustained-release microparticles containing)

IT Periodontium
(disease, treatment of, with sustained-release microparticles containing therapeutic agents and polymers)

IT Periodontium
(disease, periodontitis, treatment of, with sustained-release microparticles containing therapeutic agents and polymers)

IT Pharmaceutical dosage forms
(microparticles, sustained-release, polymers for)

IT Polyethers, biological studies
RL: BIOL (Biological study)
(ortho esters, pharmaceutical sustained-release microparticles containing)

IT Anhydrides
RL: BIOL (Biological study)
(poly-, pharmaceutical sustained-release microparticles containing)

IT Polyesters, biological studies
RL: BIOL (Biological study)
(polyamide-, pharmaceutical sustained-release microparticles containing)

IT Polyamides, biological studies
RL: BIOL (Biological study)
(polyester-, pharmaceutical sustained-release microparticles containing)

IT **60-54-8D**, **Tetracycline**, salt 79-14-1D, Glycolic acid, alkylene derivative, polymer 87-69-4D, Tartaric acid, alkylene derivative,

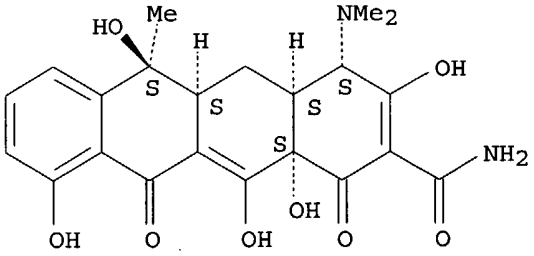
polymer 110-15-6D, Butanedioic acid, alkylene derivative, polymer 110-17-8D, Fumaric acid, alkylene derivative, polymer 144-62-7D, Oxalic acid, alkylene derivative, polymer 1000-05-1, Octamethyltetrasiloxane **13614-98-7**, Minocycline hydrochloride **24390-14-5**, Doxycycline hyclate 24980-41-4, Poly(caprolactone) 25038-75-9, Poly(D-lactide) 25248-42-4, Poly(caprolactone) 25322-68-3 26009-03-0, Polyglycolide 26161-42-2 26202-08-4, Polyglycolide 26780-50-7, Glycolide DL-lactide-copolymer 26917-25-9 29223-92-5, Poly(p-dioxanone) 29433-86-1 30846-39-0, Glycolide L-lactide-copolymer 33135-50-1, Poly(L-lactide) 75734-93-9 131560-86-6
RL: BIOL (Biological study)
(pharmaceutical sustained-release microparticles containing)

IT **60-54-8, Tetracycline 564-25-0**
10118-90-8, Minocycline
RL: BIOL (Biological study)
(pharmaceutical sustained-release microparticles containing polymers and)

IT **60-54-8D, Tetracycline**, salt **13614-98-7**, Minocycline hydrochloride **24390-14-5**, Doxycycline hyclate
RL: BIOL (Biological study)
(pharmaceutical sustained-release microparticles containing)

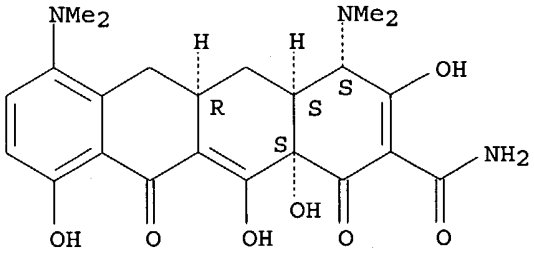
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 13614-98-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, monohydrochloride, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

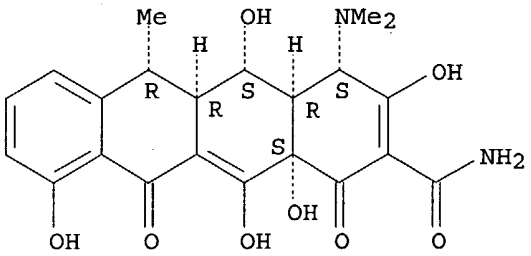
RN 24390-14-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride,

(4S,4aR,5S,5aR,6R,12aS)-, compd. with ethanol (2:1), monohydrate (9CI) (CA INDEX NAME)

CM 1

CRN 10592-13-9
CMF C22 H24 N2 O8 . Cl H

Absolute stereochemistry.



● HCl

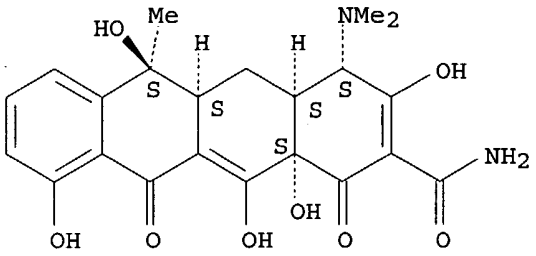
CM 2

CRN 64-17-5
CMF C2 H6 O

H_3C-CH_2-OH

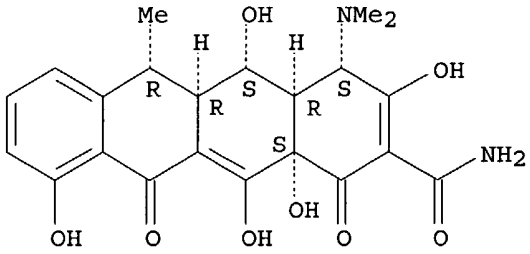
IT **60-54-8, Tetracycline 564-25-0**
10118-90-8, Minocycline
RL: BIOL (Biological study)
(pharmaceutical sustained-release microparticles containing polymers and)
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



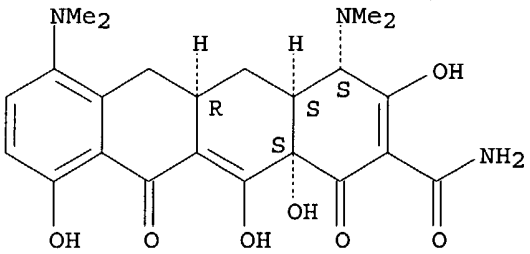
RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 10118-90-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:49592 HCAPLUS
DN 114:49592
ED Entered STN: 09 Feb 1991
TI Pharmaceutical composition containing antibiotics for sustained delivery to periodontal pockets
IN Brizzolara, Nancy Susan; Lanzilotti, Michael Gerard; **Lawter, James Ronald**
PA American Cyanamid Co., USA
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K007-16
ICS A61K009-14; A61K009-26
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 374531	A2	19900627	EP 1989-121886	19891127
EP 374531	A3	19910731		
EP 374531	B1	19940504		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
AT 105177	E	19940515	AT 1989-121886	19891127
ES 2051968	T3	19940701	ES 1989-121886	19891127
IL 92700	A1	19940530	IL 1989-92700	19891213
CA 2006105	AA	19900622	CA 1989-2006105	19891220
CA 2006105	C	20000314		
DK 8906558	A	19900623	DK 1989-6558	19891221
DK 174915	B1	20040223		
NO 8905167	A	19900625	NO 1989-5167	19891221
NO 178605	B	19960122		

	NO 178605	C	19960502		
	AU 8947077	A1	19900628	AU 1989-47077	19891221
	AU 635912	B2	19930408		
	JP 02184620	A2	19900719	JP 1989-329760	19891221
	JP 2901674	B2	19990607		
	ZA 8909857	A	19901031	ZA 1989-9857	19891221
	KR 138651	B1	19980515	KR 1989-19157	19891221
	US 5366733	A	19941122	US 1991-706327	19910528
PRAI	US 1988-289076	A	19881222		
	EP 1989-121886	A	19891127		

OS MARPAT 114:49592

AB An oral composition for the local administration of a therapeutic agent to the periodontal pocket as a plurality of dry, discrete microparticles comprises ≥1 antibiotic dispersed in a matrix comprising a biocompatible and biodegradable polymer. Minocycline.HCl was added to a solution of poly(glycolide-co-DL-lactide)glycolic acid initiated polymer with inherent viscosity of 0.44 dL/g in CH2Cl2 and dispersed. Polydimethylsiloxane was added to this dispersion and stirred before it was added to octmethyltetrasiloxane and stirring was carried out for 2 more h and then it was dried under vacuum at 40°. The composition was administered to the periodontal pockets created in dogs in an amount of 1mg of minocycline base/pocket. A dispersing apparatus for dispensing the microparticles to the periodontal pockets are described. The mean crevicular fluid levels of minocycline was 10μg/mL for 14 days.

ST oral microparticle minocycline periodontal pocket; sustained delivery microparticle minocycline periodontal pocket

IT Periodontium
(disease, treatment of, with sustained-release microparticles containing antibiotics)

IT Pharmaceutical dosage forms
(microparticles, of antibiotics, polymer additives in, for delivery to periodontal pockets)

IT Polyethers, biological studies
RL: BIOL (Biological study)
(ortho esters, oral microparticles containing antibiotics and, for sustained delivery to periodontal pocket)

IT 1000-05-1, Octamethyltetrasiloxane 26009-03-0, Polyglycolide 26023-30-3 26161-42-2 26202-08-4, Polyglycolide 26680-10-4, Poly(DL-lactide) 26780-50-7, Glycolide DL-lactide-copolymer 29223-92-5, Poly(p-dioxanone) 29433-86-1 30846-39-0, Glycolide L-lactide-copolymer 33135-50-1, Poly(L-lactide) 131560-86-6
RL: BIOL (Biological study)
(oral microparticles containing antibiotics and, for sustained delivery to periodontal pocket)

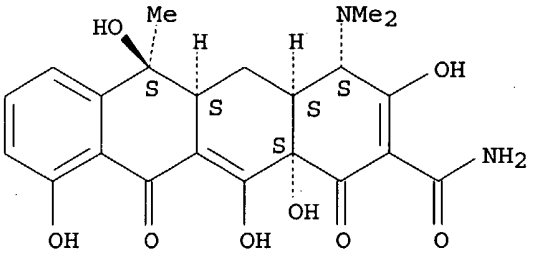
IT **60-54-8**, **Tetracycline 564-25-0**, Doxycycline
10118-90-8 13614-98-7, Minocycline hydrochloride
24390-14-5, Doxycycline hyclate
RL: BIOL (Biological study)
(oral microparticles containing, for sustained delivery to periodontal pocket)

IT **60-54-8**, **Tetracycline 564-25-0**, Doxycycline
10118-90-8 13614-98-7, Minocycline hydrochloride
24390-14-5, Doxycycline hyclate
RL: BIOL (Biological study)
(oral microparticles containing, for sustained delivery to periodontal pocket)

RN 60-54-8 HCAPLUS

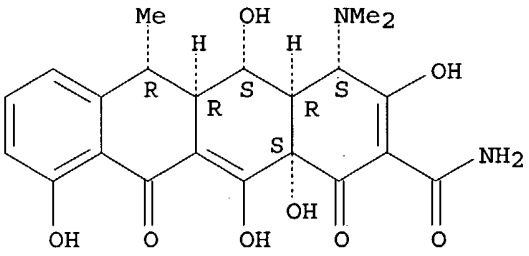
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



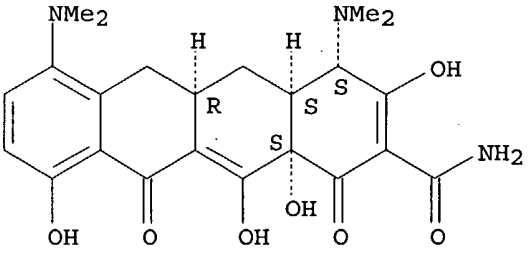
RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



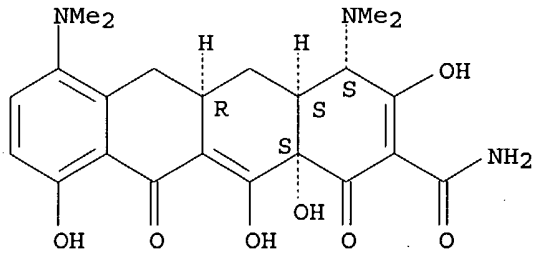
RN 10118-90-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 13614-98-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, monohydrochloride, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



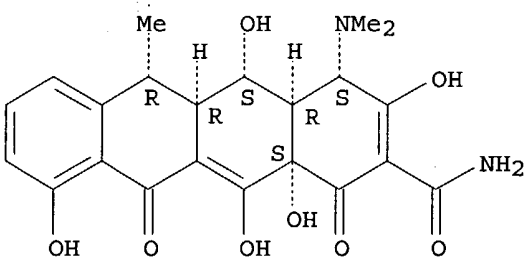
● HCl

RN 24390-14-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aR,5S,5aR,6R,12aS)-, compd. with ethanol (2:1), monohydrate (9CI) (CA INDEX NAME)

CM 1

CRN 10592-13-9
CMF C22 H24 N2 O8 . Cl H

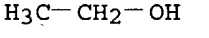
Absolute stereochemistry.



● HCl

CM 2

CRN 64-17-5
CMF C2 H6 O



L12 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:520905 HCAPLUS
DN 111:120905
ED Entered STN: 01 Oct 1989
TI Hardening agent for phase separation microencapsulation of pharmaceuticals
IN **Lawter, James Ronald**; Lanzilotti, Michael Gerard
PA American Cyanamid Co., USA
SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW
DT Patent
LA English
IC ICM B01J013-02
ICS A61K009-52
CC 63-6 (Pharmaceuticals)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 292710	A2	19881130	EP 1988-106617	19880518
	EP 292710	A3	19890322		
	EP 292710	B1	19920102		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	US 5000886	A	19910319	US 1987-54372	19870526
	IL 86274	A1	19920329	IL 1988-86274	19880504
	AT 70992	E	19920115	AT 1988-106617	19880518
	ES 2038236	T3	19930716	ES 1988-106617	19880518
	CA 1330533	A1	19940705	CA 1988-567503	19880524
	DK 8802850	A	19881127	DK 1988-2850	19880525
	DK 169119	B1	19940822		
	NO 8802277	A	19881128	NO 1988-2277	19880525
	NO 177984	B	19950925		
	NO 177984	C	19960103		
	AU 8816592	A1	19881201	AU 1988-16592	19880525
	AU 618000	B2	19911212		
	JP 63307813	A2	19881215	JP 1988-126021	19880525
	ZA 8803737	A	19890222	ZA 1988-3737	19880525
	KR 9701209	B1	19970204	KR 1988-6203	19880526
	US 5143661	A	19920901	US 1990-602414	19901022
	US 5500228	A	19960319	US 1990-617382	19901126
PRAI	US 1987-54372	A	19870526		
	EP 1988-106617	A	19880518		
	US 1988-288739	B1	19881222		

AB Volatile silicone fluids, such as octamethylcyclotetrasiloxane (I), are useful as nontoxic, nonflammable hardening agents removable by vacuum drying in phase-separation microencapsulation of pharmaceuticals in the manufacture of slow-release products. (D-Trp6)-LH-RH (0.24 g) was dispersed in a solution containing 6 g poly(glycolide-co-DL-lactide) (II) in 300 g CH2Cl2; this dispersion was homogenized; 219 g di-Me siloxane (viscosity 350 cSt) was added with stirring until the microspheres were completely discharged into I, and the microcapsules collected and vacuum dried to give microcapsules (residual I content 2-3%) that exhibited sustained release into a phosphate buffer for 45 days.

ST silicone hardener phase sepn microencapsulation; phase sepn microencapsulation pharmaceutical hardener; cyclotetrasiloxane hardener phase sepn microencapsulation; glycolide copolymer microcapsule pharmaceutical; lactide copolymer microcapsule pharmaceutical

IT Cyclosiloxanes
RL: BIOL (Biological study)
(hardeners, for phase-separation microencapsulation of pharmaceuticals)

IT Anesthetics
Peptides, biological studies
Proteins, biological studies
RL: BIOL (Biological study)
(microencapsulation of, phase-separation, hardeners for, volatile silicone fluids as)

IT Siloxanes and Silicones, biological studies
RL: BIOL (Biological study)
(volatile, hardeners, for phase-separation microencapsulation of pharmaceuticals)

IT Antibiotics

(aminoglycoside, microencapsulation of, phase-separation, hardeners for, volatile silicone fluids as)

IT Encapsulation
(micro-, phase separation, of pharmaceuticals, hardeners for, volatile silicone fluids as)

IT Pharmaceutical dosage forms
(microcapsules, slow-release, manufacture of, hardeners for, volatile silicone fluids as)

IT Drying
(vacuum, in phase-separation microencapsulation of pharmaceuticals using volatile silicone fluid hardeners)

IT Antibiotics
(β-lactam, microencapsulation of, phase-separation, hardeners for, volatile silicone fluids as)

IT 556-67-2, Octamethylcyclotetrasiloxane
RL: BIOL (Biological study)
(hardener, for phase-separation microencapsulation of pharmaceuticals)

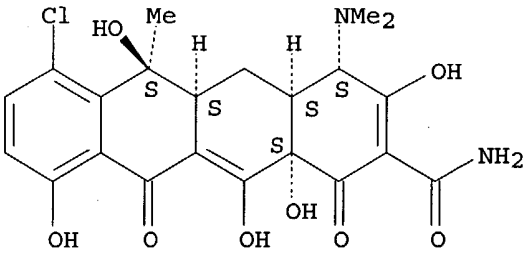
IT 26780-50-7
RL: BIOL (Biological study)
(microencapsulation by, of pharmaceuticals, hardeners for, volatile silicone fluids as)

IT **57-62-5**, **Chlortetracycline 60-54-8**, **Tetracycline** 61-33-6, biological studies **64-73-3**, Declomycin 68-19-9, Vitamin B12 **79-57-2**, **Oxytetracycline** 91-22-5, Quinoline, biological studies **564-25-0 914-00-1**, Methacycline **10118-90-8**, Minocycline 11111-12-9, Cephalosporin 57773-63-4
RL: BIOL (Biological study)
(microencapsulation of, phase-separation, hardeners for, volatile silicone fluids as)

IT **57-62-5**, **Chlortetracycline 60-54-8**, **Tetracycline 64-73-3**, Declomycin **79-57-2**, **Oxytetracycline 564-25-0 914-00-1**, Methacycline **10118-90-8**, Minocycline
RL: BIOL (Biological study)
(microencapsulation of, phase-separation, hardeners for, volatile silicone fluids as)

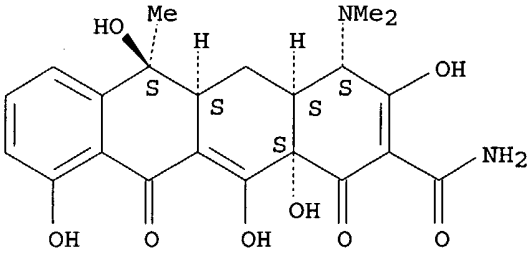
RN 57-62-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



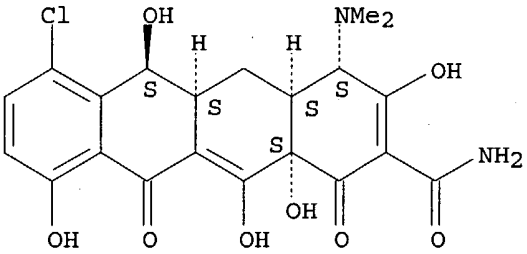
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-73-3 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

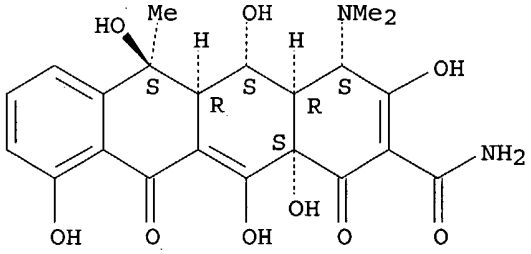
Absolute stereochemistry.



● HCl

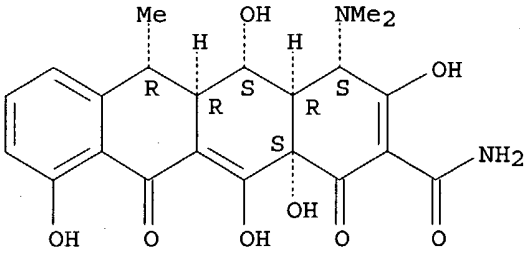
RN 79-57-2 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



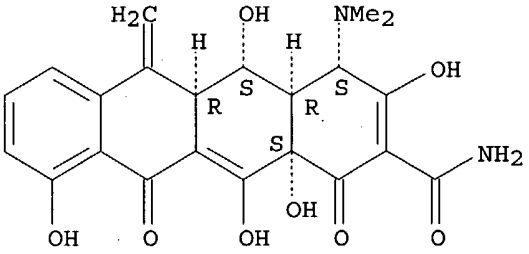
RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



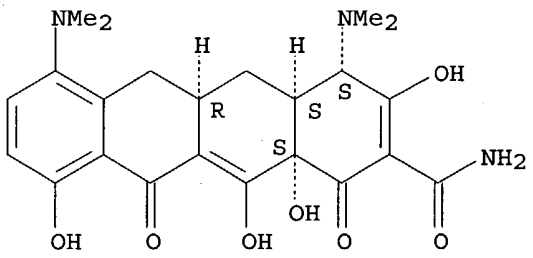
RN 914-00-1 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methylene-1,11-dioxo-, (4S,4aR,5S,5aR,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 10118-90-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> => d all hitstr tot

L54 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **2003:672010** HCAPLUS
DN **139:185363**
ED Entered STN: 28 Aug 2003
TI Anti-inflammatory composition comprising **tetracycline**
IN Gardner, Wallace J.
PA USA
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English

IC ICM A61K007-16
ICS A61K031-65
NCL 424049000; 514152000
CC 62-7 (Essential Oils and Cosmetics)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6610274	B1	20030826	US 2001-23017	20011218
	US 2004029842	A1	20040212	US 2003-424270	20030428
PRAI	US 2000-258027P	P	20001222		
	US 2001-23017	A2	20011218		

AB Therapeutic composition having anti-infective activity. The therapeutic composition is a formulation comprising an antibiotic, preferably a **tetracycline**, most preferably doxycycline, which has not been chemical modified to eliminate antimicrobial efficacy. The antibiotic is preferably in a liquid vehicle, most preferably one that contains at least 20% alc. by volume The therapeutic composition is preferably in local delivery form and is self-administered **orally** or via the nasal cavity. Administration of the therapeutic composition of the present invention treats diseases that originate from the **oral** cavity or that do not originate in the **oral** cavity, but are affected by contaminants, such as viruses or bacteria, in the **oral** cavity entering the bloodstream including but not limited to periodontal disease, sinusitis, gingivitis, the common cold, sore throat, influenza, allergies (particularly to tree pollen), resistant pneumonia, diseases of the gastrointestinal tract, inflammatory diseases such as rheumatoid arthritis, cancer, ulcers, heart disease, etc. A 100 mg and a 50 mg **capsule** of doxycycline were opened and the contents added to 3 oz of Listerine **mouthwash.** This mixture was shaken until the doxycycline was dispersed in the **mouthwash.** A patient with gum infection administered one oz of the mixture into the **mouth** and swirled in the **mouth** for 30 s, three times daily for three months. The upper molar gum infection healed within several days and gumline recession ceased.

ST antiinflammatory **tetracycline mouthwash** gum infection

IT Anti-infective agents
Anti-inflammatory agents
Antimicrobial agents
Human
Mouthwashes
(anti-inflammatory composition comprising **tetracycline**)

IT Respiratory tract, disease
(sinusitis; anti-inflammatory composition comprising **tetracycline**)

IT **60-54-8**, **Tetracycline 564-25-0**, Doxycycline
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-inflammatory composition comprising **tetracycline**)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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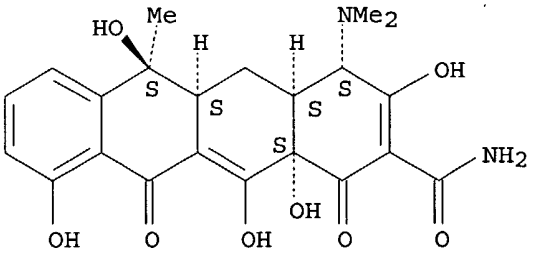
IT **60-54-8**, **Tetracycline 564-25-0**, Doxycycline
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-inflammatory composition comprising **tetracycline**)

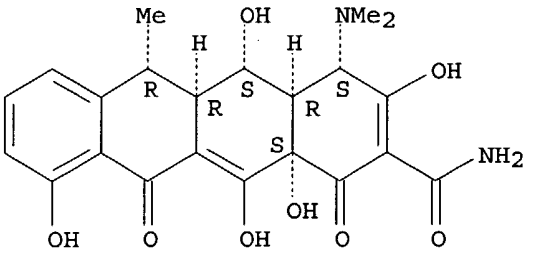
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L54 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **2002:748788** HCAPLUS
DN **137:242209**
ED Entered STN: 03 Oct 2002

TI Methods and compositions using **tetracyclines** and other agents for treating and preventing **mucositis**
IN Sonis, Stephen T.; Fey, Edward G.
PA Mucosal Therapeutics LLC, USA
SO U.S., 7 pp., Cont.-in-part of U. S. Ser. No. 65,012, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-65
NCL 514152000
CC 1-12 (Pharmacology)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6458777	B1	20021001	US 1999-265299	19990309
	CA 2323863	AA	19990916	CA 1999-2323863	19990312
	WO 9945910	A2	19990916	WO 1999-US5437	19990312
	WO 9945910	A3	20000210		
	W: AU, BR, CA, IL, JP, MX, NZ, PL				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9930837	A1	19990927	AU 1999-30837	19990312
	AU 753288	B2	20021017		
	BR 9908857	A	20001031	BR 1999-8857	19990312
	EP 1064001	A2	20010103	EP 1999-912467	19990312
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002506023	T2	20020226	JP 2000-535325	19990312
	US 2001011097	A1	20010802	US 2001-800855	20010307
	US 2003036560	A1	20030220	US 2002-260093	20020927
	US 6713463	B2	20040330		
PRAI	US 1998-77977P	P	19980313		
	US 1998-65012	B2	19980423		
	US 1999-265299	A	19990309		
	WO 1999-US5437	W	19990312		
	US 2001-800855	A3	20010307		

AB A method is disclosed for reducing or inhibiting **mucositis** in a patient, which includes administering an inflammatory cytokine inhibitor or a mast cell inhibitor, or a combination thereof. Methods for the treatment of **mucositis** using a **tetracycline** are claimed.

ST **mucositis** treatment inflammatory cytokine inhibitor; mast cell inhibitor **mucositis** treatment; **tetracycline** **mucositis** treatment

IT **Mucous** membrane
(disease, inflammation; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Drug delivery systems**
(gels; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Drug delivery systems**
(**lozenges**; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Drug delivery systems**
(**oral rinses**; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Drug delivery systems**
(**pastes**; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Drug delivery systems**
(**tablets**; **tetracyclines** and other agents for treating and preventing **mucositis**)

IT Anti-inflammatory agents

Antitumor agents
Chemotherapy
Human
Neoplasm
Radiotherapy
(**tetracyclines** and other agents for treating and preventing **mucositis**)

IT **Tetracyclines**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracyclines** and other agents for treating and preventing **mucositis**)

IT **60-54-8, Tetracycline 60-54-8D, Tetracycline**, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracyclines** and other agents for treating and preventing **mucositis**)

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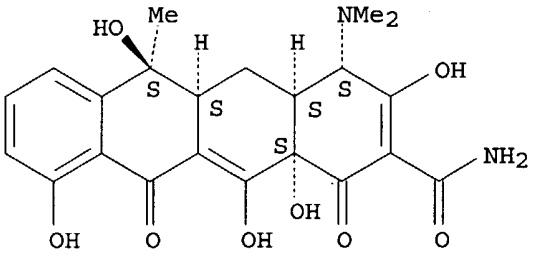
IT **60-54-8**, **Tetracycline 60-54-8D**, **Tetracycline**, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**tetracyclines** and other agents for treating and preventing **mucositis**)

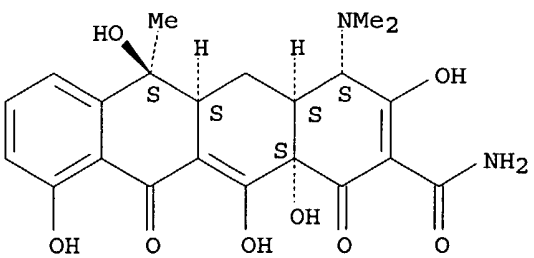
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L54 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1999:549133** HCAPLUS
DN **131:161652**
ED Entered STN: 31 Aug 1999
TI Antibiotics in dry dosage forms for the treatment of shallow ulcers of the **oral mucosa**
IN Hau, Kee Hung
PA USA
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-00
ICS A61K031-00; A61K031-43; A61K031-545; A61K031-65
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9942083	A1	19990826	WO 1998-US8661	19980430
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5981499	A	19991109	US 1998-26901	19980220
CA 2320731	AA	19990826	CA 1998-2320731	19980430
AU 9871697	A1	19990906	AU 1998-71697	19980430
AU 762585	B2	20030626		
EP 1056442	A1	20001206	EP 1998-918854	19980430
EP 1056442	B1	20030730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9815780	A	20011120	BR 1998-15780	19980430
JP 2002503684	T2	20020205	JP 2000-532100	19980430
AT 245967	E	20030815	AT 1998-918854	19980430
RU 2211022	C2	20030827	RU 2000-124268	19980430
CN 1226425	A	19990825	CN 1998-116391	19980722
PRAI US 1998-26901	A	19980220		
WO 1998-US8661	W	19980430		

AB The invention provides a medicament for topically treating aphthous ulcers in the **oral mucosa**, and methods of use. The medicament comprises a **troche** or powder comprising a dry dosage of one or more antibiotics and, preferably, one or more polyvalent metal compds. The **troche** or powder is directly applied to the aphthous ulcer and **dissolved** in **saliva**, within about 5 to about 15 min, thereby directly delivering a supratherapeutic dosage of the antibiotic to the ulcerated **oral** tissue. Further, in a preferred embodiment the **troche**/powder directly delivers a therapeutically high concentration of a polyvalent metal compound in suspension to the aphthous ulcer, thereby forming a protective barrier over the ulcerated **oral** tissue. A **troche** contained **oxytetracycline**.cntdot.HCl 50, Mg stearate 1, stearic acid 0.6, lactose 7.5, and binding agents q.s. to 73 mg/each.
ST aphthous ulcer antibiotic **troche** powder bioavailability; **oxytetracycline** magnesium stearate **troche** aphthous ulcer
IT Glycosides

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT Antibiotics
Drug bioavailability
(antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT **Tetracyclines**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT **Mouth**
Mouth
(aphthous ulcer, inhibitors; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT Antiulcer agents
(aphthous ulcer; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT **Drug delivery systems**
(**lozenges**, **troches**; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT Antibiotics
(macrolide; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT Metals, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyvalent; antibiotics and polyvalent metal compds. for direct administration to shallow ulcers of **oral mucosa**)

IT **Drug delivery systems**
(powders, **oral**; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT Antibiotics
(β-lactam; antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

IT 557-04-0, Magnesium stearate 7429-90-5D, Aluminum, compds., biological studies 7440-32-6D, Titanium, compds., biological studies 7440-50-8D, Copper, compds., biological studies 7440-66-6D, Zinc, compds., biological studies 7440-69-9D, Bismuth, compds., biological studies 7440-70-2D, Calcium, compds., biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics and polyvalent metal compds. for direct administration to shallow ulcers of **oral mucosa**)

IT 56-75-7, Chloramphenicol 113-98-4, Penicillin G potassium salt 132-98-9, Penicillin V potassium salt 1404-90-6, Vancomycin 1405-87-4, Bacitracin 1406-05-9, Penicillins **2058-46-0**, **Oxytetracycline** hydrochloride 11111-12-9, **Cephalosporins**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)

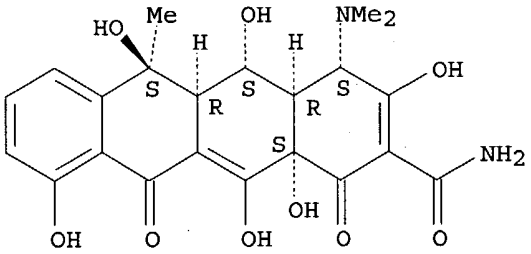
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Edgar, F; WO 9703699 A 1997 HCAPLUS

(2) Georgi, S; GB 2290707 A 1996 HCAPLUS
(3) Georgi, S; GB 2290708 A 1996 HCAPLUS
(4) Georgi, S; DE 4434929 A 1996 HCAPLUS
(5) Green Cross Corp The; JP 63030421 A 1988 HCAPLUS
(6) Johnson & Johnson Prod Inc; EP 0250187 A 1987 HCAPLUS
(7) Pehrom Pharmaceutical Corp; WO 9104034 A 1991 HCAPLUS
IT **2058-46-0, Oxytetracycline** hydrochloride
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics in dry dosage forms for direct administration to shallow ulcers of **oral mucosa**)
RN 2058-46-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aR,5S,5aR,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L54 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1997:231304** HCAPLUS
DN **126:282817**
ED Entered STN: 10 Apr 1997
TI Intraoral medicament-releasing device
IN Sipos, Tibor
PA Digestive Care Inc., USA
SO U.S., 10 pp., Cont.-in-part of U.S. 5,433,952.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K009-14
NCL 424489000
CC 63-6 (Pharmaceuticals)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5614223	A	19970325	US 1995-503202	19950717
	US 5433952	A	19950718	US 1993-109632	19930820
PRAI	US 1992-878155		19920504		
	US 1993-109632		19930820		

AB Disclosed are controlled drug release devices for attachment to teeth by the **dissolving** action of the **saliva**, comprising: (a) a plurality of discrete granules with a particle size of 850-1700 μm, consisting of a pharmaceutically active agent in finely divided powder form imbedded in a solid non-erodable 2-hydroxyethyl methacrylate-Me methacrylate copolymer (I), wherein the granules are compressed into dosage forms in the shape of **tablets**, **capsules**,

globules, half-football shapes, veneers or thick films and are coated with (b) a non-erodable diffusion rate-controlling membrane consisting of I. Granules containing NaF 74.25, I (50:50) 24.75, and talc 1 % were compressed to give a **tablet**, which was spray-coated with a composition containing I (30:70). The rate of fluoride release from the coated **tablets** was evaluated.

ST methacrylate copolymer drug release **oral** cavity; **tablet** sodium fluoride polymer matrix coating

IT Deodorants (personal)
(breath fresheners; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT **Drug delivery systems**
(**capsules**; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT Tooth
(caries, treatment of; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT Periodontium
(disease, treatment of; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT Antibacterial agents
Appetite depressants
(polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT **Drug delivery systems**
(solids, **oral**; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT **Saliva**
(stimulants; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT **Drug delivery systems**
(**tablets**; polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT Osteoporosis
(treatment of; polymer matrixes and coatings for controlled drug release in **oral** cavity)

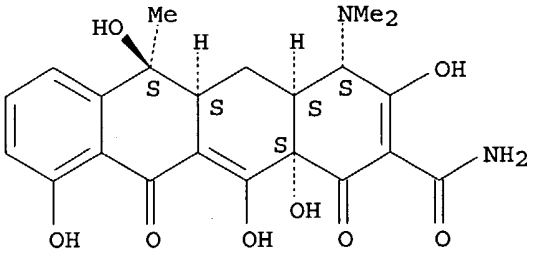
IT 55-56-1, Chlorhexidine 58-22-0, Testosterone **60-54-8D**, **Tetracycline**, hydroxamates 79-77-6, β-Ionone 92-13-7, Pilocarpine 127-41-3, α-Ionone 443-48-1, Metronidazole **564-25-0**, Doxycycline 1095-90-5, Methadone hydrochloride 1400-61-9, Nystatin **2444-65-7** 7631-97-2, Sodium monofluorophosphate 7681-49-4, Sodium fluoride, biological studies 7773-52-6, Cetylpyridinium 7783-47-3, Stannous fluoride 7789-75-5, Calcium fluoride, biological studies 9007-12-9, Calcitonin 9011-97-6, Cholecystokinin **10118-90-8**, Minocycline 26355-01-1, 2-Hydroxyethyl methacrylatemethyl methacrylate copolymer **27720-34-9**, 4-Hydroxy-4-**dedimethylaminotetracycline** 79517-01-4, Octreotide acetate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymer matrixes and coatings for controlled drug release in **oral** cavity)

IT **60-54-8D**, **Tetracycline**, hydroxamates **564-25-0**, Doxycycline **2444-65-7** **10118-90-8**, Minocycline **27720-34-9**, 4-Hydroxy-4-**dedimethylaminotetracycline**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polymer matrixes and coatings for controlled drug release in **oral** cavity)

RN 60-54-8 HCAPLUS

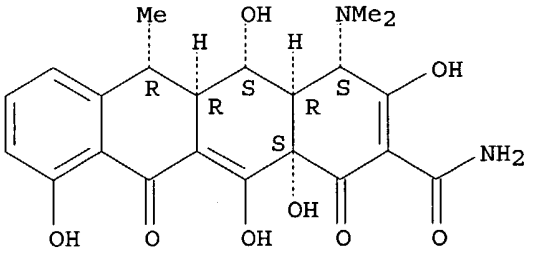
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



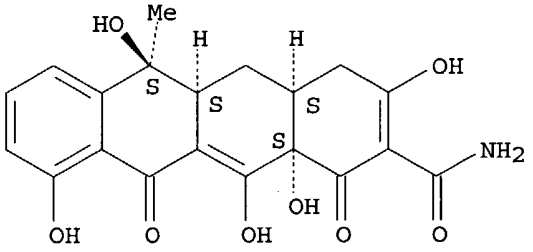
RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



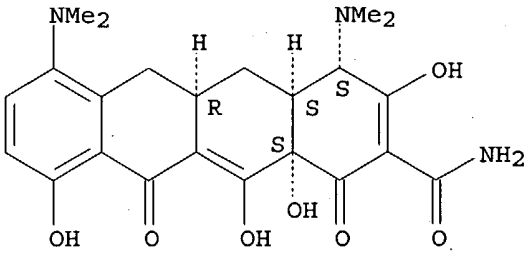
RN 2444-65-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



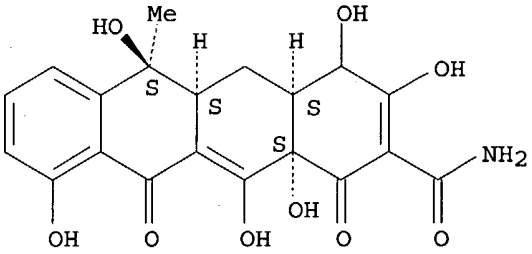
RN 10118-90-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 27720-34-9 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,4,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L54 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1995:861517** HCAPLUS
DN **123:237583**
ED Entered STN: 18 Oct 1995
TI Preparation for treating dental disease containing sulfated saccharides
PA Bukh Meditec A/S, Den.; Helerup and Tandlaegeselskabet Jesper Hamburger ApS
SO Israeli, 40 pp.
CODEN: ISXXAQ
DT Patent
LA English
IC ICM A61K007-16
CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IL 91438	A1	19950330	IL 1989-91438	19890825
PRAI	IL 1989-91438		19890825		

AB A topical composition for the prophylaxis or treatment of dental diseases (caries, plaque, gingivitis, periodontitis, alveolitis, pulpitis, post-surgical and post-extraction wounds, tooth eruption, bone resorption, prosthetic irritation, cysts, neoplasms, and mycotic and viral **oral** infections) comprises an Al complex of sulfated sucrose, and other biol. active agents (antibiotics, antibacterials, antimicrobials, antivirals, antimycotics, local anesthetics, antiseptics, disinfectants, analgesics, anti-inflammatory agents, antineoplastic and anticaries agents). The preparation is in the form of a solution, suspension, salve, **paste**, powder, gel, cream, dental fixative, periodontal implant, chewing gum, chewable **tablet**, effervescent **tablet**, or **lozenge**. A topical **paste** preparation for insertion into infected periodontal pockets was prepared containing sucralfate 30,

tetracycline 3, hyaluronic acid 0.3, pectin 10, gelatin 10, CMC 10, and medium-chain triglycerides 60 g, resp.

ST topical dentifrice sulfated sucrose dental disease; sucralfate topical dentifrice dental disease

IT Analgesics
Antibiotics
Bactericides, Disinfectants, and Antiseptics
Chewing gum
Dentifrices
Fungicides and Fungistats
Inflammation inhibitors
Mouthwashes
Neoplasm inhibitors
Surfactants
Virucides and Virustats
Wound healing promoters
(topical compns. for treating dental disease containing sulfated sucrose)

IT Gelatins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(topical compns. for treating dental disease containing sulfated sucrose)

IT Glycerides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(C12-18, topical compns. for treating dental disease containing sulfated sucrose)

IT Lung, disease
(alveolitis, topical compns. for treating dental disease containing sulfated sucrose)

IT Tooth
(disease, cyst, topical compns. for treating dental disease containing sulfated sucrose)

IT Gingiva
(disease, gingivitis, topical compns. for treating dental disease containing sulfated sucrose)

IT Tooth
(disease, infection, topical compns. for treating dental disease containing sulfated sucrose)

IT Periodontium
(disease, periodontitis, topical compns. for treating dental disease containing sulfated sucrose)

IT Tooth
(disease, pulpitis, topical compns. for treating dental disease containing sulfated sucrose)

IT Dentifrices
(gels, topical compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**gels, topical, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**implants, topical** compns. for treating dental disease containing sulfated sucrose)

IT Anesthetics
(local, topical compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**lozenges, topical** compns. for treating dental disease containing sulfated sucrose)

IT Tooth
(neoplasm, topical compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**

(**ointments, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**ointments, creams, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**solns., topical, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**suspensions, topical, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**tablets, chewable, topical** compns. for treating dental disease containing sulfated sucrose)

IT **Pharmaceutical dosage forms**
(**tablets, effervescent, topical** compns. for treating dental disease containing sulfated sucrose)

IT 57-50-1D, Sucrose, sulfated, complexes 54182-58-0, Sucralfate 73264-44-5, α-D-Glucopyranoside, 1,3,4,6-tetra-O-sulfo-β-D-fructofuranosyl, tetrakis(hydrogen sulfate), octapotassium salt 74135-10-7, Sodium sucrose octasulfate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical compns. for treating dental disease containing sulfated sucrose)

IT 7631-97-2, Sodium monofluorophosphate 9000-69-5, Pectin 9004-67-5, Methyl cellulose
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(topical compns. for treating dental disease containing sulfated sucrose)

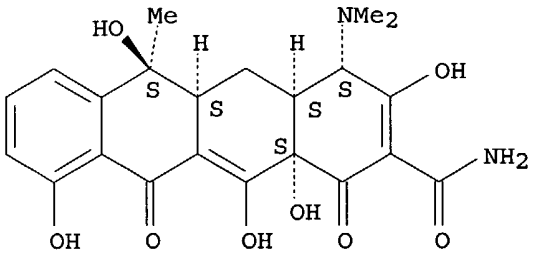
IT **60-54-8, Tetracycline**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical compns. for treating dental disease containing sulfated sucrose)

IT **60-54-8, Tetracycline**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical compns. for treating dental disease containing sulfated sucrose)

RN 60-54-8 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L54 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN

AN **1995:759074** HCAPLUS

DN **123:179503**

ED Entered STN: 26 Aug 1995

TI Controlled-release **oral** pharmaceuticals containing methacrylate polymers

IN Sipos, Tibor

PA Digestive Care Inc., USA

SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 878,155, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K009-14
NCL 424489000
CC 63-6 (Pharmaceuticals)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5433952	A	19950718	US 1993-109632	19930820
	CA 2093282	AA	19931105	CA 1993-2093282	19930402
	CA 2093282	C	19990112		
	US 5614223	A	19970325	US 1995-503202	19950717
PRAI	US 1992-878155		19920504		
	US 1993-109632		19930820		

AB Controlled-release devices for releasing a pharmaceutically active agent into the **oral** cavity, by the **dissolving** action of the **saliva**, and a method of preparing such devices are claimed. **Tablets** were prepared from core granules containing NaF 62.25, 2-hydroxyethyl methacrylate-methacrylic acid copolymer (I) 20.75, talc 0.84, with I coating of 16.16 % were prepared

ST controlled release **oral** pharmaceutical; methacrylate polymer fluoride controlled release **tablet**

IT Antibiotics
Bactericides, Disinfectants, and Antiseptics
Sialagogues
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release **oral** medicament-releasing device)

IT Deodorants
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(breath fresheners, controlled-release **oral** medicament-releasing device)

IT **Pharmaceutical dosage forms**
(**capsules, controlled-release, controlled-release oral** medicament-releasing device)

IT **Pharmaceutical dosage forms**
(**controlled-release**, rods; **controlled-release oral** medicament-releasing device)

IT Amines, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrofluorides, controlled-release **oral** medicament-releasing device)

IT **Pharmaceutical dosage forms**
(**oral, controlled-release, controlled-release oral** medicament-releasing device)

IT **Pharmaceutical dosage forms**
(**tablets, controlled-release, controlled-release oral** medicament-releasing device)

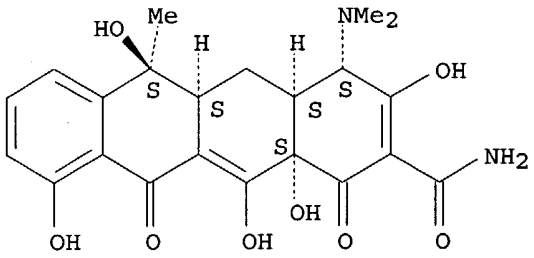
IT **60-54-8, Tetracycline**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release **oral** medicament-releasing device)

IT 7631-97-2, Sodium monofluorophosphate 7681-49-4, Sodium fluoride, biological studies 7783-47-3, Stannous fluoride 7789-75-5, Calcium fluoride, biological studies 31693-08-0, 2-Hydroxyethyl methacrylate-methacrylic acid copolymer
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release **oral** pharmaceuticals containing methacrylate polymers)

IT **60-54-8, Tetracycline**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release **oral** medicament-releasing device)
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



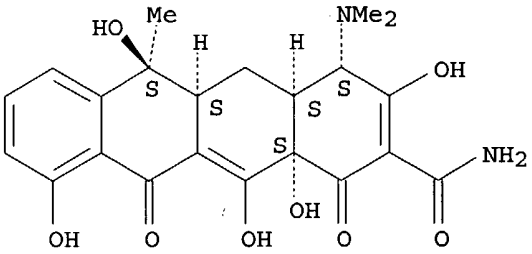
L54 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1992:598276** HCAPLUS
DN **117:198276**
ED Entered STN: 15 Nov 1992
TI Nonantibacterial **tetracycline** compositions possessing antiplaque properties
IN McNamara, Thomas F.; Golub, Lorne M.; Ramamurthy, Nangavarum S.
PA Research Foundation of State University of New York, USA
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K007-16
ICS A61K031-65
CC 62-7 (Essential Oils and Cosmetics)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9213515	A1	19920820	WO 1992-US1085	19920210
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5223248	A	19930629	US 1991-654073	19910211
	CA 2103801	AA	19920812	CA 1992-2103801	19920210
	CA 2103801	C	20021119		
	EP 571556	A1	19931201	EP 1992-907764	19920210
	EP 571556	B1	19960619		
	R: BE, DE, DK, FR, GB, IT, LU, NL, SE				
	JP 06505745	T2	19940630	JP 1992-507282	19920210
	US 5770588	A	19980623	US 1996-591949	19960123
PRAI	US 1991-654073	A	19910211		
	WO 1992-US1085	W	19920210		
	US 1992-874369	B2	19920427		
	US 1993-164478	B1	19931209		

AB Nonantimicrobial **tetracyclines** prevent plaque formation on teeth. Addition of 4-**dedimethylaminotetracycline** to the feed of diabetic rats, at 20 mg/day, inhibited dental plaque-formation. Examples are given of incorporation of the **tetracycline** into dentifrices, **mouth washes**, chewing gums, etc.
ST tooth plaque inhibition **tetracycline** deriv
IT Chewing gum
Dentifrices
Mouthwashes

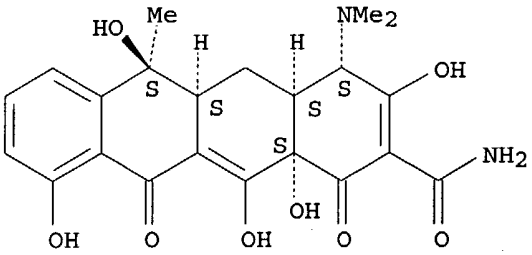
(tetracyclien derivs.-containing, for dental plaque control)
IT Tooth
(disease, plaque, prevention of, with **tetracycline** derivs.)
IT **Pharmaceutical dosage forms**
(**lozenges**, tetracyclien derivs.-containing, for dental plaque control)
IT **60-54-8 60-54-8D**, **Tetracycline**, derivs.
2444-65-7, 4-De(dimethylamino)-**tetracycline**
4199-33-1, **Tetracyclinonitrile 4495-20-9**
4632-89-7 15866-90-7 17947-61-4
27720-34-9, 4-Hydroxy-4-**dedimethylaminotetracycline**
137453-91-9
RL: BIOL (Biological study)
(dental plaque formation inhibition by)
IT **60-54-8 60-54-8D**, **Tetracycline**, derivs.
2444-65-7, 4-De(dimethylamino)-**tetracycline**
4199-33-1, **Tetracyclinonitrile 4495-20-9**
4632-89-7 15866-90-7 17947-61-4
27720-34-9, 4-Hydroxy-4-**dedimethylaminotetracycline**
137453-91-9
RL: BIOL (Biological study)
(dental plaque formation inhibition by)
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



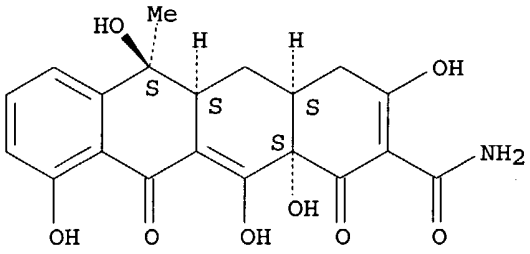
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



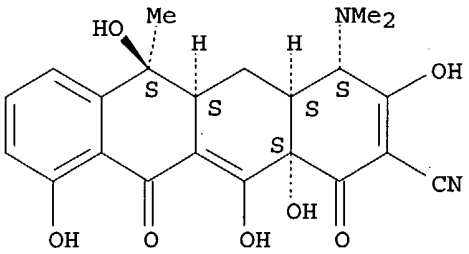
RN 2444-65-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



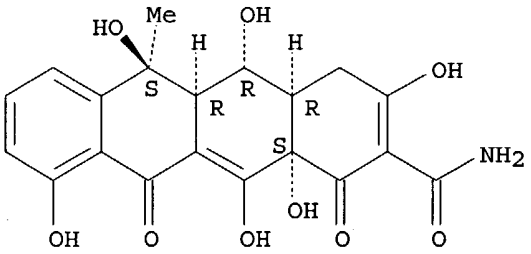
RN 4199-33-1 HCAPLUS
CN 2-Naphthacenecarbonitrile, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



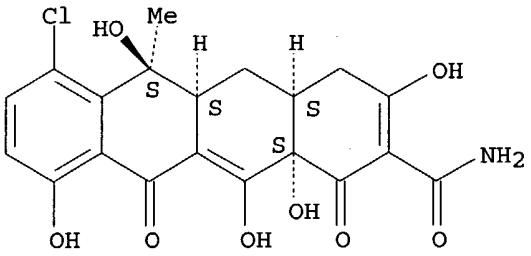
RN 4495-20-9 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4aR,5R,5aR,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



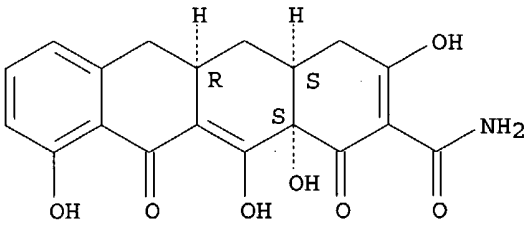
RN 4632-89-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-chloro-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

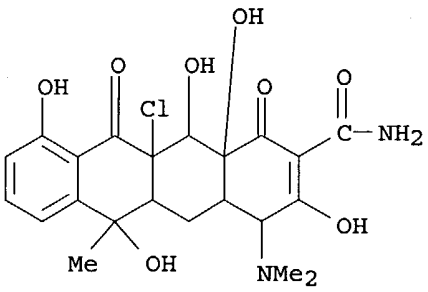


RN 15866-90-7 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

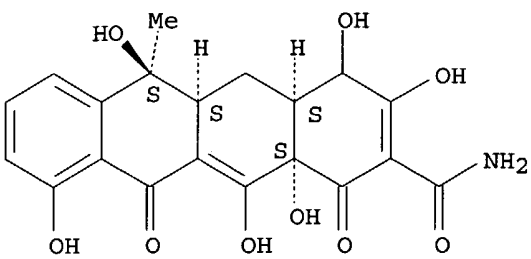


RN 17947-61-4 HCAPLUS
CN 2-Naphthacenecarboxamide, 11a-chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,11a,12,12a-decahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (8CI, 9CI) (CA INDEX NAME)



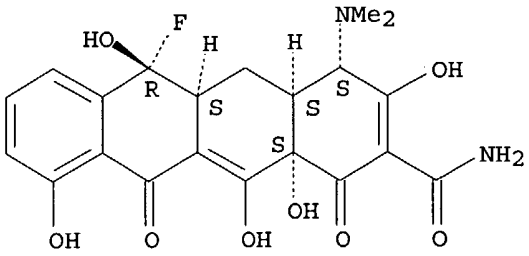
RN 27720-34-9 HCAPLUS
CN 2-Naphthacenecarboxamide, 1,4,4a,5,5a,6,11,12a-octahydro-3,4,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 137453-91-9 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-6-fluoro-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-1,11-dioxo-, (4S,4aS,5aS,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L54 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1992:455763** HCAPLUS
DN **117:55763**
ED Entered STN: 08 Aug 1992
TI The basic study on **dissolution** behavior of dental drugs
AU Miwa, Yoshihiro; Yamaji, Akira; Miki, Yasuo; Kimura, Shigenobu; Okada, Hiroshi
CS Dent. Hosp., Osaka Univ., Osaka, Japan
SO Shika Yakubutsu Ryoho (1991), 10(2), 127-32
CODEN: SYRYEJ; ISSN: 0288-1012
DT Journal
LA Japanese
CC 63-5 (Pharmaceuticals)
AB The release behavior of dental drugs was investigated by **dissoln**. test in artificial **saliva.** This knowledge is important for judging their medical effects. The com. dental drugs studied were nine kinds of **troches**, five kinds of ointments, four kinds of dental corns and a few others. The **dissoln.** test was modified from the paddle method of the Japanese Pharmacopeia XI. The **dissoln.** solns. used both artificial **saliva** I (AS I) of only inorg. salts and artificial **saliva** II (AS II) with inorg. salts and CMC-Na. The 50% **dissoln.** time of **troches** at I was 5 min->120 min and large differences among each of the brands were observed The **dissoln.** of dental ointments in As I could not be observed except for Periocline and showed the greatest rate of 60% in As II. All dental corns were **dissolved** completely within 30 min in AS I.
ST **dissoln** dental pharmaceutical
IT Solution rate
(of drugs, from dental pharmaceuticals)
IT **Saliva**
(artificial, drug release from dental pharmaceuticals into)
IT **Pharmaceutical dosage forms**
(**lozenges**, drug release from, for dental uses, into artificial **saliva**)
IT **Pharmaceutical dosage forms**
(**ointments**, drug release from, for dental uses, into artificial **saliva**)
IT **64-75-5**, **Tetracycline** hydrochloride 76-25-5, Triamcinolone acetonide 123-03-5, Cetylpyridinium chloride 538-71-6, Domiphen bromide 1161-88-2, Sulfatolamide 1405-10-3, Fradiomycin sulfate 1405-87-4, Bacitracin **2058-46-0**, **Oxytetracycline** hydrochloride 3697-42-5, Chlorhexidine hydrochloride 6223-35-4 115905-40-3, Decalinium chloride

138860-90-9, Neoleucomycin
RL: PROC (Process)
(release of, from **lozenges**, into artificial **saliva**)

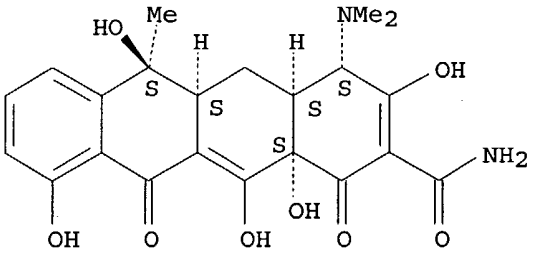
IT 50-02-2, Dexamethasone **13614-98-7**
RL: PROC (Process)
(release of, from ointment for **oral** use, into artificial **saliva**)

IT **64-75-5**, **Tetracycline** hydrochloride **2058-46-0**, **Oxytetracycline** hydrochloride
RL: PROC (Process)
(release of, from **lozenges**, into artificial **saliva**)

RN 64-75-5 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

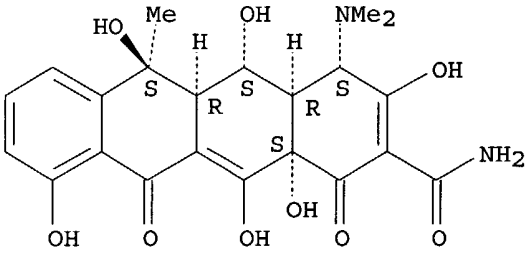


● HCl

RN 2058-46-0 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aR,5S,5aR,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



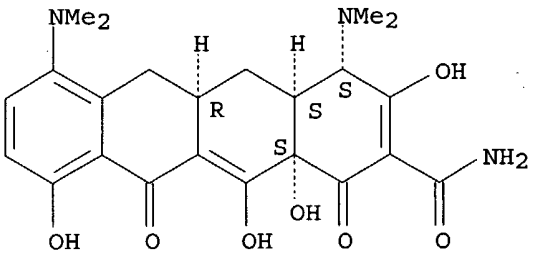
● HCl

IT **13614-98-7**
RL: PROC (Process)
(release of, from ointment for **oral** use, into artificial **saliva**)

RN 13614-98-7 HCAPLUS

CN 2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, monohydrochloride, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L54 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1989:219010** HCAPLUS
DN **110:219010**
ED Entered STN: 10 Jun 1989
TI Evaluation of a controlled-release **tablet** containing **tetracycline** hydrochloride bonded to tooth for the treatment of periodontal disease
AU Collins, Augusta E. M.; Deasy, P. B.; MacCarthy, Denise J.; Shanley, D. B.
CS Trinity Coll., Univ. Dublin, Dublin, Israel
SO International Journal of Pharmaceutics (1989), 51(2), 103-14
CODEN: IJPHDE; ISSN: 0378-5173
DT Journal
LA English
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
AB **Tablets** containing **tetracycline**-HCl (I) and poly(hydroxybutyric acid) (PHB) were evaluated in vitro in simulated **saliva** pH 6.6 at 37°. Variation in compression pressure over the range 106-318 kg·cm-2 had negligible effect on drug release. An increase in drug loading from 30 to 60% caused a progressive increase in drug release. Decrease in average mol. weight of PHB or alteration to poly(lactic acid) tended to reduce drug release. Increasing copolymn. of PHB with hydroxyvalerate tended to increase the initial drug release. **Tablets** containing 50% I phys. dispersed in PHB, as confirmed by DSC, were evaluated in a panel of 12 patients suffering from gingivitis. The mean **salivary** level of drug produced was in the therapeutic range over the 10 day study period. The average plaque index, gingival index and pocket depth of the treated group showed desirable reduction in comparison to the control group, but the clin. improvement was not maintained when treatment was stopped. Examination of plaque samples by dark-field, phase-contrast and fluorescence microscopy with gram-staining confirmed a favorable alteration in microbial flora during treatment.
ST controlled release **tablet tetracycline**; periodontium disease **tetracycline tablet**
IT Solution rate
(of **tetracycline**, from controlled-release **tablets**, in periodontal disease treatment)
IT Periodontium
(disease, treatment of, with controlled-release **tetracycline tablets**, in humans)
IT Gingiva
(disease, gingivitis, treatment of, with controlled-release **tetracycline tablets**, in humans)
IT Polyesters, biological studies

RL: BIOL (Biological study)
(hydroxybutyric acid, controlled-release **tablets** containing **tetracycline** and, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

IT Polyesters, biological studies
RL: BIOL (Biological study)
(hydroxybutyric acid-hydroxyvaleric acid, controlled-release **tablets** containing **tetracycline** and, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

IT Polyesters, biological studies
RL: BIOL (Biological study)
(lactic acid, controlled-release **tablets** containing **tetracycline** and, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

IT **Pharmaceutical dosage forms**
(**tablets**, **controlled-release**, **tetracycline**-containing, for periodontal disease treatment in humans)

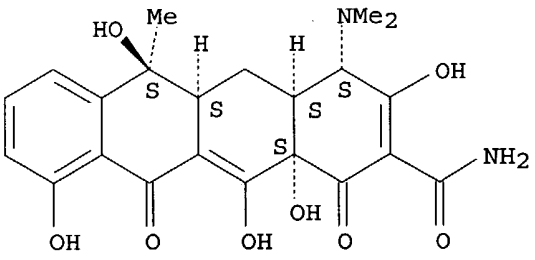
IT 26023-30-3 26063-00-3 26100-51-6, Poly(DL-lactic acid) 52352-27-9, Poly(hydroxybutyric acid) 80181-31-3
RL: BIOL (Biological study)
(controlled-release **tablets** containing **tetracycline** and, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

IT **60-54-8**, **Tetracycline 64-75-5**, **Tetracycline** hydrochloride
RL: BIOL (Biological study)
(controlled-release **tablets** containing, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

IT **60-54-8**, **Tetracycline 64-75-5**, **Tetracycline** hydrochloride
RL: BIOL (Biological study)
(controlled-release **tablets** containing, bonded to tooth, for periodontal disease treatment in humans, evaluation of)

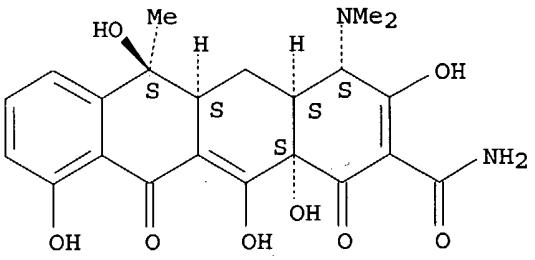
RN 60-54-8 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-75-5 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

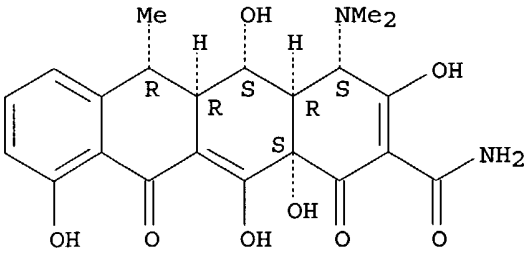
Absolute stereochemistry. Rotation (-).



● HCl

L54 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1987:9301** HCAPLUS
DN **106:9301**
ED Entered STN: 11 Jan 1987
TI Pharmacokinetics and bioavailability of doxycycline in humans
AU Campistron, G.; Coulais, Y.; Caillard, C.; Mosser, J.; Pontagnier, H.; Houin, G.
CS Unite Pharmacocinet. Clin., CHU Purpan, Toulouse, F-31059, Fr.
SO Arzneimittel-Forschung (1986), 36(11), 1705-7
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
AB There was no significant differences among pharmacokinetic parameters in humans (maximum plasma concentration, corresponding tissue, area under the plasma concentration curve and unchanged amts. recovered in the urine) of doxycycline [**564-25-0**] from a new **tablet** formulation (Doxycycline Plantier) as compared to those of **oral solution** and com. available **capsules.** The maximum values of plasma concns. were slightly higher after administration of the **tablets** than after the **oral solution** and **capsules** (5.66 bs. 5.55 and 4.53 mg/L, resp.).
ST doxycycline bioavailability pharmacokinetics **tablet**
IT Drug bioavailability
(of doxycycline, from **tablets** in humans)
IT **Pharmaceutical dosage forms**
(**tablets**, doxycycline bioavailability and pharmacokinetics from)
IT **564-25-0**, Doxycycline
RL: BIOL (Biological study)
(bioavailability and pharmacokinetics of, from **tablets** in humans)
IT **564-25-0**, Doxycycline
RL: BIOL (Biological study)
(bioavailability and pharmacokinetics of, from **tablets** in humans)
RN 564-25-0 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L54 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1981:20444** HCAPLUS
DN **94:20444**
ED Entered STN: 12 May 1984
TI Preparation for administration to the **mucosa** of the **oral** or nasal cavity
IN Nagai, Tsuneji; Machida, Yoshiharu; Suzuki, Yoshiki; Ikura, Hiroshi
PA Teijin Ltd., Japan
SO U.S., 14 pp.
CODEN: USXXAM
DT Patent
LA English
IC A61K902-00; A61K009-14; A61K009-22
NCL 424019000
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4226848	A	19801007	US 1979-17059	19790302
	US 4250163	A	19810210	US 1979-103558	19791213
PRAI	US 1979-17059		19790302		

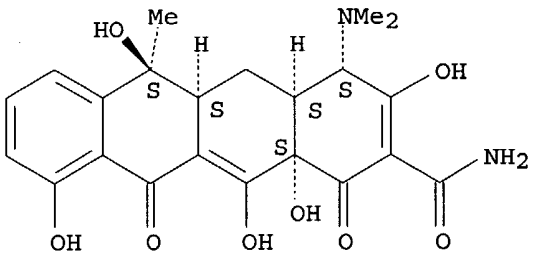
AB A slow-release preparation adhering to the **mucosa** of nasal or **oral** cavity contains a matrix made of a cellulose ether 50-95% and a homo- or copolymer of an acrylate or its salt 50-5% in which the appropriate drug is dispersed. Thus, **tablets** containing hydroxypropyl cellulose [9004-64-2] 85, Carbopol 934 [9007-16-3] 15, and triamcinolone acetonide [76-25-5] 0.125 parts, and adhered to the **mucosa** of the **oral** cavity of subjects with recurrent stomatic aphthosis relieved the inflammation by 1 or 2 administrations, whereas a marketed **oral** ointment containing the same drug required 6-7 applications.
ST cellulose ether polyacrylate adhesive **mucosa**; **mouth** adhesive cellulose ether polyacrylate; nose adhesive cellulose ether polyacrylate
IT **Mouth**
Nose
(**mucosa**, disease, adhesive pharmaceutical polymeric matrix for treatment of)
IT 9004-64-2 9007-16-3
RL: BIOL (Biological study)
(composite containing, pharmaceutical adhesive for **mucosa** of nasal or **oral** cavity)
IT 9003-01-4 9004-62-0 9004-65-3 9004-67-5
RL: BIOL (Biological study)
(composite, pharmaceutical adhesive for **mucosa** of nasal or **oral** cavity)
IT 51-30-9 53-86-1 **64-75-5** 76-25-5 94-09-7
RL: BIOL (Biological study)
(nasal and **oral** **mucosa**-adhesive polymeric matrix containing)
IT **64-75-5**

RL: BIOL (Biological study)
(nasal and **oral mucosa**-adhesive polymeric matrix containing)

RN 64-75-5 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, (4S,4aS,5aS,6S,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



● HCl

=> => fil wpix
FILE 'WPIX' ENTERED AT 15:27:14 ON 29 MAY 2004
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FILE LAST UPDATED: 27 MAY 2004 <20040527/UP>
MOST RECENT DERWENT UPDATE: 200434 <200434/DW>
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http://www.thomsonscientific.com/litalert <<<

>>> THE DISPLAY LAYOUT HAS BEEN CHANGED TO ACCOMODATE THE NEW FORMAT GERMAN PATENT APPLICATION AND PUBLICATION NUMBERS. SEE ALSO:
http://www.stn-international.de/archive/stnews/news0104.pdf <<<

>>> SINCE THE FILE HAD NOT BEEN UPDATED BETWEEN APRIL 12-16

THERE WAS NO WEEKLY SDI RUN <<<

=> d all abeq tech abex tot

L88 ANSWER 1 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2004-156358 [15] WPIX
DNC C2004-062035
TI Rapidly **disintegrating** solid dosage form useful for treating and preventing mucositis comprises a **tetracycline.**
DC B05 B07
IN **LAWTER, J R**
PA (ORAP-N) **ORAPHARMA INC**
CYC 102
PI WO 2004000223 A2 20031231 (200415)* EN 27 A61K000-00
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
US 2004029843 A1 20040212 (200415) A61K031-65 <--
ADT WO 2004000223 A2 WO 2003-US19686 20030620; US 2004029843 A1 Provisional US 2002-390068P 20020620, Provisional US 2002-407730P 20020903, US 2003-601259 20030620
PRAI US 2002-407730P 20020903; US 2002-390068P 20020620; US 2003-601259 20030620
IC ICM A61K000-00; **A61K031-65**
AB WO2004000223 A UPAB: 20040302
NOVELTY - Solid dosage form rapidly **disintegrating** in an aqueous medium comprises a **tetracycline.**
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the preparation of the above dosage form.
ACTIVITY - Antiulcer; Antiinflammatory.
The antiinflammatory efficacy of meclocycline sulfosalicylate (Ia) was evaluated in a hamster having mucositis in the cheek pouch. An aqueous solution (0.1 ml) containing (Ia) (0.1 mg/ml) was applied to the cheek pouch thrice a day for 22 days. The cheek pouch was photographed and scored visually for ulceration. The hamsters treated with (Ia) showed more than 75% reduction in the ulceration as compared to the saline treated control animals.
MECHANISM OF ACTION - None given.
USE - Used for the treatment and prevention of oral mucositis resulting from radiation or chemotherapy for cancer (claimed).
ADVANTAGE - The solid dosage form rapidly (preferably within 2 minutes) **disintegrates** in **saliva** or is released in at least 10 minutes to form a suspension or solid **paste** (e.g. **mouth rinse**) which slowly releases the **tetracycline**, has friability of upto 2% when tested as per the USP friability test, and a hardness of at least 15 Newtons. The solid dosage form **disintegrates** rapidly, is convenient, easy to transport, store and administer. The formulation provides longer term contact with oral mucosa. The poorly absorbable **tetracycline** is not removed from the gastrointestinal tract through absorption and systemic exposure and accompanying side effects are minimized.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B02-T**; B08-C01; B12-M07; B12-M10A; B12-M10C; **B12-M11**; B14-C03; B14-N05
TECH UPTX: 20040302
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Formulation: The solid dosage form is a hard, compressed form for direct oral dosing and

comprises a matrix containing a non direct compression filler and a lubricant and a polyvalent metal ion complex of **tetracycline** (preferably in a base form). The solid dosage form additionally comprises an agent selected from non-steroidal antiinflammatory drug, inflammatory cytokine inhibitor, mast cell inhibitor, matrix metalloproteinase (MMP) inhibitor, nitric oxide inhibitor and/or antifungal agent. The obtained dosage forms contain a network of carrier containing **tetracycline** . The solid dosage is in the form of **tablet** (e.g. sugar coated **tablets**, film coated **tablets**, multiple compressed **tablets** including layered and press coated **tablets**, **tablets** for solution, effervescent **tablets**, sustained release **tablets**, extruded **tablets**, frozen **tablets**, hard **tablets**, soft **tablets**, pills, pellets, granules, microspheres, powder or shaped powders). Preferred Method: The solid dosage form is prepared by forming discrete units of a suspension of water, a water soluble or water dispersible carrier and **tetracycline** comprising a suspension of solid particles and removing the solvent from the discrete units.

ABEX UPTX: 20040302

ADMINISTRATION - Administration is oral or topical (claimed). No dosage is given.

EXAMPLE - Meclocycline hydrochloride powder (0.1 mg/ml) was added to a solution containing gellan gum (0.5 mg/ml), methyl paraben (0.18%), propyl paraben (0.02%) and tromethamine buffer.

L88 ANSWER 2 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2004-059367 [06] WPIX

DNN N2004-048025 DNC C2004-024351

TI Dispensing apparatus for dispensing material(s) to periodontal pocket, includes barrel including body portion and tube portion with tip, plunger for contacting portion of external force applying member, and dry particles within tip.

DC A96 B05 B07 D21 P32

IN BATES, M; HUNTER, G H; LANZILOTTI, M G; **LAWTER, J R**

PA (ORAP-N) **ORAPHARMA INC**

CYC 102

PI US 2003186191 A1 20031002 (200406)* 22 A61C005-04

WO 2003082139 A1 20031009 (200406) EN A61C005-04

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

US 6682348 B2 20040127 (200408) A61C005-04

ADT US 2003186191 A1 US 2002-112450 20020329; WO 2003082139 A1 WO 2003-US9579 20030326; US 6682348 B2 US 2002-112450 20020329

PRAI US 2002-112450 20020329

IC ICM A61C005-04

AB US2003186191 A UPAB: 20040123

NOVELTY - A dispensing apparatus for dispensing material(s) to a periodontal pocket, comprises a barrel (100) including a body portion and a tube portion (106). The tube portion extends from the body portion (104) and includes a tip (140) configured for being deformed to at least one geometry different from its initial geometry. A plunger (108) contacts a portion of an external force applying member. Dry particles are provided within the tip.

USE - For dispensing material(s) to a periodontal pocket used in the treatment of dental disease (claimed).

ADVANTAGE - The inventive dispensing apparatus can effectively deliver therapeutic agents directly to the periodontal pockets. It includes a reusable handle that is fitted with disposable cartridges,

loaded with a composition, for e.g. a precise dose of a therapeutic agent. This saves clinician time, eliminates guessing as to the proper dose, and reduces the amount of disposable instrumentation, making the process for economical. The handle includes a body that has a configuration familiar to dental professionals, allowing them to use the inventive apparatus with greater comfort and less training time. The cartridge provides for effective delivery of compositions, such as agents, as its tip is deformable, from a circular to an oval shape, either manually by the dental professional or upon contact with teeth or other tissues, where this flattened tip can penetrate deeply into pockets for quick and direct application of therapeutic agents.

DESCRIPTION OF DRAWING(S) - The figure is a cross-sectional view of the cartridge with the plunger.

Barrel 100
Body portion 104
Tube portion 106
Plunger 108
Flanges 128
Nub 130
Tip 140
Dwg.5A/20

FS CPI GMPI
FA AB; GI; DCN
MC CPI: A12-V03D; B02-D; B02-M; **B02-T**; B04-C03; B05-A01B; B11-C03; B11-C06A; B14-N06; D08-A04
TECH UPTX: 20040123

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Component: The body portion includes flexible flanges (128) for forming a temporary locking engagement with a portion of an external force applying member. It also includes nub(s) (130) for receipt in a correspondingly configured indent in a portion of an external force applying member to prevent the barrel from rotating. The apparatus additionally comprises an external force applying member including a handle. The handle includes a sleeve including an indent for engaging the nub of the barrel; a spring-loaded shaft housed at least partially within the sleeve. The sleeve and the shaft engage a portion of each of the flexible flanges of body potion of the barrel. The spring-loaded shaft includes a proximal end and a distal end; and a thumb ring at the proximal end. The apparatus additionally comprises a removable closure for covering a portion of the tip to maintain the integrity of the dry particles. It is enclosed in a package comprising an aluminum-laminate pouch.

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Component: The dry particles comprise therapeutic agent(s) (0.00001-50 pbw) dispersed in a dry matrix comprising a biocompatible and biodegradable polymer. The therapeutic agent is an antibacterial, an antibiotic, an antifungal agent, an anti-inflammatory agent, an immunosuppressive agent, an immunostimulatory agent, a dentinal desensitizer, an odor masking agent, an immune reagent, an anesthetic, an antiseptic, a nutritional agent, an antioxidant, a lipopolysaccharide complexing agent, a peroxide, and/or a tissue growth factor. The therapeutic agent comprises an antibiotic from a **tetracycline**, a pharmaceutically acceptable salt of a **tetracycline**, hydrates of a **tetracycline** or hydrates of a pharmaceutically acceptable salt of a **tetracycline.** The **tetracycline** is doxycycline, a pharmaceutically acceptable salt of doxycycline, hydrates of doxycycline or hydrates of a pharmaceutically acceptable salt of doxycycline. The **tetracycline** is minocycline, a pharmaceutically acceptable salt of minocycline, hydrates of minocycline or hydrates of a pharmaceutically acceptable salt of minocycline. The therapeutic agent includes minocycline hydrochloride.

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The polymer is polyglycolide, poly(l- lactide), poly(dl) lactide, poly (glycolide-co-lactide), poly(glycolide-co-dl lactide), poly (alpha

hydroxybutyric acid, poly(orthoesters), and/or poly (p-dioxanone). It also comprises a block copolymer of polyglycolide, trimethylene carbonate or polyethylene oxide. The barrel comprises a polymer from olefin homopolymers, and/or olefin copolymers. The plunger comprises a polymer from olefin homopolymers, olefin copolymers or polycarbonates. The olefin homopolymer or copolymer comprises a polymer from polyethylene or polypropylene.
Preferred Dimension: The particles (1-50, preferably 5-40 pbw) have a diameter of 0.1-1000 micro-m. The microparticles have a diameter of 10-200, preferably 30-120 micro-m.

L88 ANSWER 3 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2002-608240** [65] WPIX
CR 2004-080319 [08]
DNN **N2002-481721** DNC **C2002-171843**
TI Multi-component moisture activated controlled release delivery system useful in oral hygiene product e.g. **toothpaste** comprises solid nanoparticles **encapsulated** in moisture sensitive microparticles.
DC A96 B05 B07 D13 D21 P31 P32
IN SHEFER, A; SHEFER, S; SHEFER, S D
PA (SALV-N) SALVONA LLC
CYC 96
PI WO 2002045575 A2 20020613 (200265)* EN 44 A61B000-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2002041761 A 20020618 (200266) A61B000-00
EP 1328184 A2 20030723 (200350) EN A61B001-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
US 6589562 B1 20030708 (200353) A61K009-14
ADT WO 2002045575 A2 WO 2001-US51002 20011024; AU 2002041761 A AU 2002-41761 20011024; EP 1328184 A2 EP 2001-988456 20011024, WO 2001-US51002 20011024; US 6589562 B1 US 2000-696148 20001025
FDT AU 2002041761 A Based on WO 2002045575; EP 1328184 A2 Based on WO 2002045575
PRAI US 2000-696148 20001025
IC ICM A61B000-00; A61B001-00; A61K009-14
ICS A61F002-00; A61F013-00; A61K009-16; A61K009-50
AB WO 200245575 A UPAB: 20040202
NOVELTY - A multi-component moisture activated controlled release delivery system for delivery to biological surfaces comprises an oral cavity or mucous membrane of various tissues containing several solid nanoparticles (a) **encapsulated** in moisture sensitive microparticles. (a) comprises a core and a first active agent contained in it and a bioadhesive positively charged surfactant surrounding the core.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for producing the system involving:
(i) heating a core material forming the core to a temperature above the core material melting point to form a melt;
(ii) dispersing the first active agent or sensory marker into the melt;
(iii) dispersing the positively charged surfactant, the first active agent or sensory marker and a water sensitive material in the aqueous phase;
(iv) heating the suspension to a temperature above the melting point of the mixture formed in step (ii) to form a hot melt;
(v) mixing the hot melt of step (iii) with the aqueous solution formed in step (iii) to form a suspension;
(vi) high shear homogenization of the suspension above the melting

temperature of the material mixture formed in step (v) until a homogenous fine suspension is obtained;

(vii) rapidly cooling the suspension to ambient temperature to form a dispersion; and

(viii) spray drying the cooled dispersion to form a dry powder composition.

ACTIVITY - Antiinflammatory.

MECHANISM OF ACTION - None given.

USE - In oral hygiene product, in **toothpaste**, chewing gum, confectionery composition; in pharmaceutical composition, in dentifrice composition and in food product (all claimed). In the treatment of periodontal disease; for site specific delivery of biologically active ingredients or sensory markers.

ADVANTAGE - The system remains active for 10 minutes - 3 months. The nanoparticles adhere to the oral cavity or mucous membrane of various tissues such as settling around the gumline, settling sungingivally, penetrating into periodontal pocket, adhering to soft tissue and becoming immobilized over an extended period of time. The nanoparticles have an average particle diameter of 0.01 - 10 microns. The controlled release system sustains the release of the biological active ingredients or sensory markers over an extended period of time. The matrix releases the active agent upon contact with the moisture continuously over extended period of time. The system permits effective delivery of the bioadhesive nanoparticles into the oral cavity.

Dwg.0/1

FS CPI GMPI

FA AB; DCN

MC CPI: A12-V04B; B01-B02; B01-B03; B01-C01; B02-E; B02-G; B02-K; B02-N; B02-P; **B02-T**; B02-V01; B02-Z; B04-B01C; B04-C01B; B04-C02B; B04-C03B; B04-N04A; B05-A01A; B05-A01B; B05-A03; B05-B02A3; B05-B02C; B06-D01; B06-F03; B07-D08; B07-D09; B10-A02; B10-A17; B10-B04; B10-C03; B10-C04; B10-D03; B10-E02; B10-H02D; B12-M09; B12-M10; **B12-M11G**; B14-A01; B14-C03; B14-N06; D03-E09; D03-H; D08-A05; D08-B08A

TECH UPTX: 20021010

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: The first active agent is a biologically active agent, anticalculus agent, anti-microbial agent, antibiotic, antibacterial agent, cortisone, hydrocortisone, beta-methasone, dexamethasone, fluocortolone, prednisolone, triamcinolone, non-steroidal anti-inflammatory agent, plaque-**dissolving** substance, local anaesthetic, source of fluoride, source of calcium ions, source of zinc or a sensory marker. The biologically active agent is an anti-septic material, antibacterial material, anti-inflammatory material or an active ingredient that interdicts the attachment, propagation, growth and/or colonization of bacteria on teeth. The anticalculus agent is pyrophosphate salt, dialkali metal pyrophosphate salt, tetra alkali metal pyrophosphate salt, disodium dihydrogen pyrophosphate ($Na_2H_2P_2O_7$), tetrasodium pyrophosphate ($Na_4P_2O_7$) and/or tetrapotassium pyrophosphate ($K_4P_2O_7$). The pyrophosphate is optionally hydrated. The anti-microbial agent is triclosan, phenolic compound, sanguinarine, cetylpyridinium salt, benzalkonium salt, benzethonium salt, domiphen salt, bisbiguanide, chlorhexidene, bisbiguanide salt, phosphonium salt, ammonium salt, peroxide, oxidant or zinc salt. The antibiotic is penicillin, polymyxin B, vancomycin, kanamycin, erythromycin, niddamycin, spiramycin, **tetracycline**, minocycline, metronidazole or a salt of chlorhexidene. The antibacterial agent is thimerosal, chloramine, boric acid, phenol, iodoform, chlorhexidene, oral antiseptic, beta-lactam antibiotic, cefoxitin, n-formamidoyl thienamycin, thienamycin derivative, **tetracycline**, chloramphenicol, neomycin, gramicidin, kanamycin, amikacin, sismicin or tobramycin. The non-steroidal anti-inflammatory drug is flurbiprofen, ibuprofen, indomethacin, piroxicam, naproxen, antipyren, phenylbutazone or aspirin. The plaque **dissolving** substance is lysozyme chloride or

amylase. The local anaesthetic is lidocaine, procaine, benzocaine or xylocaine. The sensory marker is flavor, sweetener or cooling agent. The first active agent further comprises a second active agent (S2) selected from a sensory marker. The release rate of the first active agent is synchronized with a release rate the second active agent.

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: The hydrophobic material is natural wax, synthetic wax, biodegradable natural polymer or synthetic polymer (preferably carnauba wax or candelilla wax). The moisture sensitive microparticle is formed of a moisture sensitive matrix, which releases the active agent upon contact with the moisture and then continuously for an extended period of time. The moisture sensitive matrix material is starch derivative, natural gum (preferably gum arabic), polyvinyl alcohol having degree of hydrolysis of 75 - 99% or polycarboxylate.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Nanoparticles: (a) is formed of a hydrophobic material having melting point of 50 - 120 degreesC. The nanoparticles adhere to the oral cavity or mucous membranes of various tissues. The nanoparticles further comprises a preservative. Preferred System: The hydrophobic ends of the positively charged surfactants are embedded in the core and hydrophilic ends of the positively charged surfactant are exposed on a surface of the core. The system further comprises (S2) in the moisture sensitive matrix, which releases the second agent upon contact with the moisture and then continuously for an extended period of time. The system or the composition releases the second active agent to provide a burst of the active agent. After the burst of the second agent, the second agent is continuously released for an extended period of time.
Preferred Components: The hydrophobic material is fatty acid ester, fatty alcohol or solid hydrogenated plant oil. The moisture sensitive matrix material is protein or hydrocolloid. The hydrocolloid is xanthan, maltodextrin, galactomanan or tragacanth. The source of calcium ions is calcium acetate, calcium formate and/or calcium lactate. The source of zinc is zinc acetate, zinc benzoate, zinc citrate, zinc gluconate, zinc glycerophosphate, zinc propionate, zinc D-lactate, zinc DL-lactate, zinc pyrophosphate or zinc tartrate. The positively charged surfactant is straight-chain alkylammonium compound, cyclic alkylammonium compound, petroleum-derived cation or polymeric cationic material (preferably cetylpyridinium chloride). The bioadhesive is mucoadhesive.
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Components: The source of fluoride is sodium fluoride, potassium fluoride, tin fluoride, zinc fluoride, long-chained aminofluoride, fluorosilicate, potassium hexafluorosilicate, sodium hexafluorosilicate, fluorophosphate, ammonium fluorophosphate, sodium fluorophosphate, potassium fluorophosphate, magnesium fluorophosphate, calcium fluorophosphate, fluorozinconate, sodium, potassium fluorozirconate or tin fluorozirconate. The source of calcium ions is a calcium salt, calcium sulfate, calcium chloride, calcium phosphate and/or calcium nitrate. The source of zinc is zinc ammonium sulfate, zinc bromide, zinc borate, zinc chloride, zinc hydroxide, zinc iodide, zinc oxide, zinc sulfate or zinc nitrate.

ABEX UPTX: 20021010

ADMINISTRATION - The nanoparticles are administered orally (claimed).

EXAMPLE - A multi-component controlled release system was prepared by placing candelilla wax (120 g) in an oven at 80 degreesC and melted. Deionized water (600 g) was placed into a vessel. Mowiol 3-83 (RTM; polyvinyl alcohol) (196 g) with a degree of hydrolysis of 83% and cetylpyridinium chloride (CPC) (4 g) were added to the water and the aqueous solution was heated to 90 degreesC. The melt was mixed with menthol (80 g) and the mixture was poured into the aqueous solution and the dispersion was homogenized. The dispersion was cooled to ambient temperature to form a suspension, which was spray dried with an inlet

temperature of 380 degreesF and outlet temperature of 225 degreesF to produce dry powder consisting of 20% menthol **encapsulated** in the solid hydrophobic nanoparticles and 1% CPC in the water sensitive matrix of the microparticles. A suspension of the nanoparticles (10 g) was mixed with **toothpaste** composition (90 g). The flavor intensity of the **toothpaste** containing the nanoparticle **encapsulated** system (test) and the control containing neat menthol was determined at 10 minutes, 1 hour and 3 hours. The flavor intensity for the test/control was = 6/3 (10 minutes), 5/1 (1 hour) and 3/1 (3 hours). The results showed that the multi component controlled release system provided higher intensity of menthol for an extended period of time as compared to the control. The test composition exhibited long lasting menthol perception as compared to the control.

L88 ANSWER 4 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2001-626224** [72] WPIX
DNC **C2001-186524**
TI **Capsule** for oral administration, comprises a **disintegrator**, active component, and soluble additives, and has good strength.
DC B07
IN MURAI, K; NARITA, S; OGASA, T
PA (KYOW) KYOWA HAKKO KOGYO KK; (MURA-I) MURAI K; (NARI-I) NARITA S; (OGAS-I) OGASA T
CYC 95
PI WO 2001072285 A1 20011004 (200172)* JA 19 A61K009-16
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001042783 A 20011008 (200208) A61K009-16
EP 1269995 A1 20030102 (200310) EN A61K009-16
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
US 2003104066 A1 20030605 (200339) A61K038-05
JP 2001570246 X 20030708 (200347) A61K009-16
ADT WO 2001072285 A1 WO 2001-JP2406 20010326; AU 2001042783 A AU 2001-42783 20010326; EP 1269995 A1 EP 2001-915776 20010326, WO 2001-JP2406 20010326; US 2003104066 A1 WO 2001-JP2406 20010326, US 2002-239751 20021029; JP 2001570246 X JP 2001-570246 20010326, WO 2001-JP2406 20010326
FDT AU 2001042783 A Based on WO 2001072285; EP 1269995 A1 Based on WO 2001072285; JP 2001570246 X Based on WO 2001072285
PRAI JP 2000-86516 20000327
IC ICM A61K009-16; A61K038-05
ICS A61K031-122; A61K031-19; A61K031-198; A61K031-215; A61K031-415; A61K031-4152; A61K031-4184; A61K031-43; A61K031-433; A61K031-439; A61K031-445; A61K031-454; A61K031-4545; A61K031-495; A61K031-496; A61K031-497; A61K031-502; A61K031-522; A61K031-537; A61K031-55; A61K031-5513; A61K031-555; A61K031-57; **A61K031-65**; A61K031-675; A61K031-7032; A61K031-7048; A61K047-10; A61K047-16; A61K047-18; A61K047-26; A61K047-32; A61K047-34; A61K047-36; A61K047-38; A61K049-00; A61P001-00; A61P003-02; A61P005-00; A61P007-00; A61P007-10; A61P007-12; A61P009-00; A61P009-02; A61P011-00; A61P021-00; A61P025-00; A61P025-02; A61P025-28; A61P025-36; A61P031-00; A61P035-00; A61P037-00; A61P037-02; A61P037-08; A61P039-02; A61P043-00
AB WO 200172285 A UPAB: 20011206
NOVELTY - A **capsule** containing a **disintegrator**, an active component, and a soluble additive having an average particle diameter of 50 micro m or less, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a

method of rendering fast **disintegration** of **capsules** in **mouth.**

USE - The **capsule** is used in oral administration of medicine.

ADVANTAGE - The **capsule** is fast to **disintegrate** and retains necessary strength.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-C02A; B04-C02B; B04-C03; B06-D05; B07-A02B; B10-A07; B10-B02B; **B12-M11C**; **B12-M11D**; B14-G02A

TECH UPTX: 20011206

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Additive The additive is sugar, sugar alcohol, amino acid or derivative thereof, polyol, soluble cellulose derivative, soluble epoxy or acrylpolymer. The sugar or sugar alcohol is manitol, xylytol, sorbitol, erithritol or trihalose (all sic). Preferred Disinegrator The **disintegrator** is cross povidone (sic), crystalline cellulose approximately ocarmelose Na, carboxymethyl starch Na, or hydrocypropyl starch.

Preferred Active Component The active component is acrylic polymer, cellulose polymer, natural polymer, fat or fatty salt. It is selected from 24 specific compounds including e.g. oxatomide, ketonphenylbutazole, and glutathione.

ABEX UPTX: 20011206

ADMINISTRATION - Administration is oral.

EXAMPLE - Pulverized D-mantitol (90g) having a particle diameter of 30 micrometers was mixed with 5.5 g cross povidone (sic), 2g hydroxy propyl cellulose and 2g oxatomide (sic) and for allergies were mixed with 12 ml water to form **capsules.** The **capsules** had a strength of 18.7 % and an **disintegration** ability of 7 seconds.

L88 ANSWER 5 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2001-257842 [26] WPIX

DNC C2001-077687

TI Formulations for treating or preventing mucositis comprising **tetracycline.**

DC B03 B05

IN COMISKEY, S J; **LAWTER, J R**

PA (ORAP-N) **ORAPHARMA INC**; (COMI-I) COMISKEY S J; (LAWT-I) LAWTER J R

CYC 95

PI WO 2001019362 A2 20010322 (200126)* EN 20 A61K031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001012525 A 20010417 (200140) A61K031-00
US 2002035096 A1 20020321 (200224) A61K031-65 <--
US 2002045604 A1 20020418 (200228) A61K031-65 <--
EP 1212050 A2 20020612 (200239) EN A61K031-166
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
JP 2003509367 W 20030311 (200319) 29 A61K031-196
US 6683067 B2 20040127 (200408) A61K031-05

ADT WO 2001019362 A2 WO 2000-US40907 20000914; AU 2001012525 A AU 2001-12525 20000914; US 2002035096 A1 Provisional US 1999-153892P 19990914, Div ex US 2000-661836 20000914, US 2001-815762 20010323; US 2002045604 A1 Provisional US 1999-153892P 19990914, Cont of US 2000-661836 20000914, US 2001-7197 20011204; EP 1212050 A2 EP 2000-974107 20000914, WO 2000-US40907 20000914; JP 2003509367 W WO 2000-US40907 20000914, JP 2001-522996

20000914; US 6683067 B2 Provisional US 1999-153892P 19990914, Div ex US 2000-661836 20000914, US 2001-815762 20010323

FDT AU 2001012525 A Based on WO 2001019362; EP 1212050 A2 Based on WO 2001019362; JP 2003509367 W Based on WO 2001019362

PRAI US 1999-153892P 19990914; US 2000-661836 20000914; US 2001-815762 20010323; US 2001-7197 20011204

IC ICM A61K031-00; A61K031-05; A61K031-166; A61K031-196; **A61K031-65**
ICS A61K007-16; A61K009-06; A61K009-12; A61K009-20; A61K009-50; A61P001-00; A61P001-02; A61P001-04; A61P017-00; A61P029-00

AB WO 200119362 A UPAB: 20010515

NOVELTY - A pharmaceutical composition for treating or preventing mucositis comprises a poorly absorbed **tetracycline** in a carrier for topical administration to the mucosa is new.

DETAILED DESCRIPTION - A pharmaceutical composition for treating or preventing mucositis comprises a poorly absorbed **tetracycline** in a carrier for topical administration to the mucosa is new.

INDEPENDENT CLAIMS are included for:

(1) a method for treating a patient comprising administration of a poorly absorbed **tetracycline** in a carrier for topical administration to the mucosa; and

(2) a method for making a composition for treating a patient to prevent or treat mucositis comprising making a formulation for topical administration to the mucosa of a **tetracycline** which has less than 10% bioavailability when orally administered.

ACTIVITY - Antibacterial.

Eight hamsters with mucositis were treated with 0.1 ml of aqueous solutions containing 0.1 mg/ml meclocycline sulfosalicylate. The solution was prepared by **dissolving** meclocycline in an aqueous solution of a tromethamine buffer. Significantly lower scores were found in the group treated with the meclocycline solution than a group of hamsters treated with a placebo control consisting of the solution without meclocycline. Relative to the control group, the group treated with meclocycline had a reduction of more than 75% in the number of animal days with scores of 3 or more.

USE - The methods and compositions can be used to decrease the duration and/or severity of mucositis. The formulations may optionally also contain an antifungal agent to prevent fungal overgrowth due to reduction in the normal oral flora by the **tetracycline.**

ADVANTAGE - The compositions are safe, efficacious and easy to use. The compositions have the advantage of treating the entire gastrointestinal tract since the active ingredient is not removed from the tract via absorption. The compositions also minimize systemic exposure and accompanying side effects.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B02-M; **B02-T**; B12-M02F

TECH UPTX: 20010515

TECHNOLOGY FOCUS - PHARMACEUTICALS - The **tetracycline** is e.g. of formula (I).

R1-R5 = H, halo, OH, or other organic composition comprising 1-8C and optionally including N or O, in linear, branched or cyclic structural format.

ABEX UPTX: 20010515

SPECIFIC COMPOUNDS - The **tetracycline** is e.g. meclocycline.

ADMINISTRATION - The compositions contain about 0.001-1 mg/ml of **tetracycline.** The carrier for topical administration to the mucosa of the oral cavity and gastrointestinal tract is a **mouthwash**, **lozenge**, **tablet**, **paste** or gel. Alternatively, the composition is administered as an aerosol. The **tetracycline** is administered between one and six times daily before a patient is treated with radiation or chemotherapy.

L88 ANSWER 6 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2001-211120** [21] WPIX
DNC **C2001-062729**
TI Treatment of oral mucosa infections, e.g., gingivitis, by direct topical administration of an antibacterial agent to achieve higher effective dosages than can be achieved by other means.
DC A96 B05
IN HAU, K H
PA (ATLA-N) ATLANTIC BIOMED CORP
CYC 94
PI WO 2001012128 A2 20010222 (200121)* EN 61 A61K000-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000078826 A 20010313 (200134) A61K000-00
US 6248718 B1 20010619 (200137) A61K031-70
ADT WO 2001012128 A2 WO 2000-US40674 20000817; AU 2000078826 A AU 2000-78826 20000817; US 6248718 B1 US 1999-376950 19990818
FDT AU 2000078826 A Based on WO 2001012128
PRAI US 1999-376950 19990818
IC ICM A61K000-00; A61K031-70
ICS **A61K031-65**; A61K033-32; A61K033-34
AB WO 200112128 A UPAB: 20010418
NOVELTY - Treating infections of the oral mucosa comprises direct topical administration of a composition comprising:
(1) a dry dosage of an antibacterial agent;
(2) optionally a salt or oxide of a polyvalent metal compound in which the metal is selected from magnesium, zinc, calcium, aluminum, bismuth, titanium and/or copper; and
(3) optionally binding agents.
DETAILED DESCRIPTION - Treatment of infections of the oral mucosa comprises direct topical administration of a composition comprising:
(1) a dry dosage of an antibacterial agent effective to achieve a concentration of at least 1 mg/ml of the antibacterial agent of **saliva** in a patient;
(2) optionally a salt or oxide of a polyvalent metal compound in which the metal is selected from magnesium, zinc, calcium, aluminum, bismuth, titanium and/or copper; and
(3) optionally binding agents.
The antibacterial agent is selected from penicillins, beta-lactam antibiotics, **tetracyclines**, aminoglycosides, cephalosporins, macrolides, vancomycin, bacitracin, chloramphenicol, quinolones, sulfonamides, nitrofurans and salts and mixtures of these. An INDEPENDENT CLAIM is included for a topical medicament for treating infections in the oral mucosa, comprising component (a) as described above and optional components (b) and (c). When the composition is **dissolved** in **saliva** at the site of infection, a dosage of the antibacterial agent is directly delivered to the infection which is substantially higher than the dosage levels achieved when the antibacterial agent is delivered to the infection through blood by conventional gastrointestinal absorption or intramuscular or intravenous injection.
ACTIVITY - Antibacterial; antiulcer; antiinflammatory.
MECHANISM OF ACTION - None given.
USE - The process and composition are useful in treatment of infections of the oral mucosa, including gum disease, periodontal infection, stomatitis or gingivitis (claimed).
ADVANTAGE - Direct application of the antibacterial agent to the infected site achieves much higher concentrations of active agent at the site than can be achieved by other methods of administration, e.g.

intravenous injection. The high concentration gradients achieved at the infected site favor diffusion of the water-soluble antibacterial agent through ulcerated or damaged mucous membrane covering the infection into deeper inflamed tissues. The polyvalent metal compound releases metal ions which promote healing of the infected tissue by inducing migration and phagocytic activity of various cell types which are integral to wound healing.

Dwg.0/20

FS CPI

FA AB; DCN

MC CPI: A12-V01; B02-P; **B02-T**; B02-V01; B02-Z; B05-A01B; B05-A02; B05-A03A; B05-A03B; B06-D02; B07-A01; B10-A08; B14-A01; B14-C03; B14-N06B

TECH UPTX: 20010418

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred materials: the amount of polyvalent metal compound in the composition is 0.2-5 mg. The binding agent includes one or more polymeric binding agents, e.g. methyl cellulose, ethyl cellulose, hydroxycellulose, polyvinylpyrrolidone, a gum, a starch, lactose and/or sucrose. The composition typically includes magnesium stearate as the polyvalent metal compound. The composition is especially in the form of a **troche** or a powder.

TECHNOLOGY FOCUS - POLYMERS - Preferred materials: The binding agent includes one or more polymeric binding agents, e.g. methyl cellulose, ethyl cellulose, hydroxycellulose, polyvinylpyrrolidone, a gum, a starch, lactose and/or sucrose.

ABEX UPTX: 20010418

SPECIFIC COMPOUNDS - The antibacterial agent is especially penicillin G or **tetracycline.**

ADMINISTRATION - Administration is topical. The composition is maintained topically at the site of infection for at least 5 minutes. The dry dosage of antibacterial agent is 2-200 mg, especially about 50 mg. The amount of dry dosage is effective to achieve a concentration of at least 2 mg of antibacterial agent per ml of **saliva.** The composition is administered at least 4 times daily.

EXAMPLE - In tests, no bacterial colonies were observed on the surface of blood agar plates inoculated with **saliva** containing 1, 2 or 4 mg of ciprofloxacin per ml. Varying numbers of bacterial colonies were observed on agar plates inoculated with **saliva** containing 0.5, 0.25 or 0.12 mg of ciprofloxacin per ml. Control plates were fully covered with highly crowded bacterial colonies. The minimal total inhibition concentration of ciprofloxacin was thus determined to be about 1 mg/ml for human **salivary** microbial flora. Based on published literature, oral ingestion of 250, 500 or 1,000 mg of ciprofloxacin in healthy fasting adults, peak serum concentrations of 0.76-5.4 mg/ml were achieved. After intravenous injection of 200 or 400 mg of ciprofloxacin, peak serum levels obtained were 2.1 and 4.6 mug/ml respectively, immediately after infusion. All of these concentrations achieved by oral or intravenous administration are below the minimal total inhibition concentration for human **salivary** microbial flora.

L88 ANSWER 7 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN **1999-518499** [43] WPIX

DNC **C1999-151374**

TI Treatment of shallow aphthous ulcers in oral mucosa.

DC B05 B07

IN HAU, K H

PA (HAUK-I) HAU K H; (ATLA-N) ATLANTIC BIOMED CORP

CYC 81

PI WO 9942083 A1 19990826 (199943)* EN 41 A61K009-00

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

CN 1226425	A	19990825	(199952)			A61K031-43
US 5981499	A	19991109	(199954)			A61K031-70
AU 9871697	A	19990906	(200003)			A61K009-00
EP 1056442	A1	20001206	(200064)	EN		A61K009-00
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE						
BR 9815780	A	20011120	(200202)			A61K009-00
JP 2002503684	W	20020205	(200212)		31	A61K045-00
MX 2000008143	A1	20011101	(200279)			A61K031-00
AU 762585	B	20030626	(200353)			A61K009-00
EP 1056442	B1	20030730	(200356)	EN		A61K009-00
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE						
RU 2211022	C2	20030827	(200365)			A61K006-00
DE 69816870	E	20030904	(200366)			A61K009-00

ADT WO 9942083 A1 WO 1998-US8661 19980430; CN 1226425 A CN 1998-116391 19980722; US 5981499 A US 1998-26901 19980220; AU 9871697 A AU 1998-71697 19980430; EP 1056442 A1 EP 1998-918854 19980430, WO 1998-US8661 19980430; BR 9815780 A BR 1998-15780 19980430, WO 1998-US8661 19980430; JP 2002503684 W WO 1998-US8661 19980430, JP 2000-532100 19980430; MX 2000008143 A1 MX 2000-8143 20000818; AU 762585 B AU 1998-71697 19980430; EP 1056442 B1 EP 1998-918854 19980430, WO 1998-US8661 19980430; RU 2211022 C2 WO 1998-US8661 19980430, RU 2000-124268 19980430; DE 69816870 E DE 1998-616870 19980430, EP 1998-918854 19980430, WO 1998-US8661 19980430

FDT AU 9871697 A Based on WO 9942083; EP 1056442 A1 Based on WO 9942083; BR 9815780 A Based on WO 9942083; JP 2002503684 W Based on WO 9942083; AU 762585 B Previous Publ. AU 9871697, Based on WO 9942083; EP 1056442 B1 Based on WO 9942083; RU 2211022 C2 Based on WO 9942083; DE 69816870 E Based on EP 1056442, Based on WO 9942083

PRAI US 1998-26901 19980220

IC ICM A61K006-00; A61K009-00; A61K031-00; A61K031-43; A61K031-70; A61K045-00

ICS A61K009-14; A61K009-20; A61K031-165; A61K031-545; **A61K031-65** ; A61K031-7036; A61K031-7048; A61K033-06; A61K033-24; A61K033-30; A61K033-32; A61P001-04

AB WO 9942083 A UPAB: 19991020

NOVELTY - Medicament for topically treating aphthous ulcers in oral mucosa comprises **troche** or powder comprising dry dosage of antibiotic and preferably polyvalent metal compound.

DETAILED DESCRIPTION - Treating shallow aphthous ulcers in the oral mucosa comprises directly topically administering a **troche** or a powder comprising a dry dosage of an antibiotic selected from penicillins, beta -lactam antibiotics, **tetracyclines**, aminoglycosides, cephalosporins, macrolides, vancomycin, bacitracin, and/or chloramphenicol or their salts. The **troche** or powder delivers directly to the ulcer a dosage of the antibiotic which is higher than dosage levels achieved when the antibiotic is delivered to the ulcer through blood by conventional gastrointestinal absorption, intramuscular or intravenous injection of the antibiotic.

ACTIVITY - Antibiotic; Antiulcer.

A **troche** comprising Penicillin G (50mg), magnesium stearate (1.0mg), stearic acid (0.6mg), lactose (7.5mg) and polyvinyl pyrrolidone, cellulose esters and starch binding agents (balance) was administered to patients with aphthous ulcers directly over the ulcerated lesion. Food and beverages were avoided for one hour after each treatment. The topical treatments were conducted 4 times daily.

After 24 hours of penicillin medication, no bacterial colonies, except occasional yeast-form fungal colonies were observed.

USE - The medicaments are useful for topically treating aphthous ulcers in the oral mucosa.

ADVANTAGE - By creating a supratherapeutically high level of antibiotic on the surface of the ulcer, the extraordinarily high concentration gradient favors diffusion of the water-soluble antibiotic molecules through the membrane covering the ulcer into the deeper inflamed tissues to reach a concentration there that is substantially higher than the antibiotic levels that can be achieved via the blood stream by conventional gastrointestinal absorption or by parenteral injections. Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B02-Z; B12-M11B; B12-M11G; B14-N05
TECH UPTX: 19991020
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: The antibiotic is maintained topically on the ulcer for 1 hour. The **troche** or powder, when **dissolved** in **saliva** at the site of the ulcer, at peak level directly delivers at least 400 mg antibiotic per 1ml of **saliva** and preferably maintains an antibiotic activity of at least 2.5 mg antibiotic per 1ml of **saliva** for at least an hour. The **troche** or powder **dissolves** in **saliva** within 5-15 minutes. When the antibiotic is penicillin, the initial peak concentration of penicillin in **saliva** at the site of the ulcer is 800000 (preferably 4000) units per 1ml **saliva** for about 1 hour. When the antibiotic is **oxytetracycline** hydrochloride the initial peak concentration in **saliva** at the site of the ulcer is 400-800 (preferably 8) mg per 1ml **saliva** for about 1 hour. The **troche** or powder further comprises a salt or oxide of a polyvalent metal selected from magnesium, zinc, calcium, aluminium, bismuth, titanium and/or copper. The polyvalent metal compound is delivered in a concentration sufficiently high that, when the **troche** or powder is **dissolved** in **saliva** at the site of the ulcer, it forms a protective barrier over the ulcer. The polyvalent metal compound is delivered to the site of the ulcer in a concentration of 2-50 (preferably 10) mg per 1ml of **saliva.** The amount of polyvalent compound is 0.2-5mg. The polyvalent metal compound is magnesium stearate.
ABEX UPTX: 19991020
SPECIFIC COMPOUNDS - The antibiotic is **oxytetracycline** hydrochloride.

ADMINISTRATION - Dosage is 10-200 (preferably 50) mg administered topically.

L88 ANSWER 8 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1995-263211** [34] WPIX
CR 1993-361061 [46]; 1997-201428 [18]
DNC **C1995-119887**
TI Preparation of controlled release device - for delivery of agent to oral cavity for treating e.g. periodontal disease..
DC A14 A96 B07
IN SIPOS, T
PA (DIGE-N) DIGESTIVE CARE INC
CYC 1
PI US 5433952 A 19950718 (199534)* 8 A61K009-14
ADT US 5433952 A CIP of US 1992-878155 19920504, US 1993-109632 19930820
PRAI US 1993-109632 19930820; US 1992-878155 19920504
IC ICM A61K009-14
AB US 5433952 A UPAB: 19970512
Preparation of controlled release device for constant rate release of active agent (PA) into the oral cavity for 30-320 days is claimed where the device comprises: (a) granules comprising an intimate blend of 2-hydroxyethylmethacrylate/methylmethacrylate copolymer and AA compressed together to form a core; (b) an outer layer of a **saliva**-insol., non erodible rate controlling membrane encasing the core, allowing water to penetrate into the core to solubilise AA and allowing the creation of

an osmotic gradient that forces the solubilising agent to diffuse through the membrane at a constant rate. The process comprises: (i) preparing a PA releasing core by blending 64-84% w/w PA and 35-15% w/w 2-hydroxy ethylmethacrylate (HEM) methylmethacrylate (MM) copolymer comprising 40-60 mole% HEM and 60-40 mole % MM; (ii) granulating in the presence of a solvent comprising 20-40% v/v EtOAc and 80-60% v/v iPrOH; (ii) forming uniform granules and drying off the solvent; (iv) blending with talc in a ratio of 95:99 pts. granules to 5:1 pts.weight; (v) compressing into cores; and (vi) coating by spraying with a solution of 1-10% w/w 30:70 mole% HEM/MM copolymer in a solvent mixture of 4 pts. CH2Cl2 to 1 pt. iPrOH, the rate controlling membrane constituting 5-20% w/w of the device.

USE - The device is used for controlled release of PA into the oral cavity for a period of 30-320 days or more. It is used to release e.g. fluoride ion releasing substances such as NaF, CaF2, amine fluoride, sodium monofluorophosphate, and stannous fluoride; antibiotic **tetracyclines** such as dioxycycline and iminocycline; antcollagenolytc **tetracyclines**, such as 4,4-**dedimethylaminotetracycline**, 4-hydroxy-4-**dedimethylaminotetracycline**, **tetracycline**-2-hydroxamate and other chemically modified non antimicrobial tetracylines; antimcrobials such as chlorhexidine, cetyl pyridinium and metronidazole; **salivary** stimulants such as pilocarpine; and **mouth** deodorants such as alpha or beta ionones. The device is used to treat or prevent dental caries, incipient carious lesions around orthodontic appliances in the oral cavity and periodontal disease.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: A04-F06E5; A12-V01; **B02-T**; B04-C03B; B05-C07; B07-D04A; B07-D09; B10-A17; B12-M10A; **B12-M11D**; B14-N06

L88 ANSWER 9 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1990-211296 [28] WPIX
CR 1988-339310 [48]
DNC C1990-091232
TI Microparticles for treating dental disease - comprising biodegradable polymer containing therapeutic agent.
DC A96 B07 D21
IN LANZILOTTI, M G; **LAWTER, J R**
PA (AMCY) AMERICAN CYANAMID CO
CYC 21

PI	EP 374532	A	19900627 (199028)*		15	
	R: AT BE CH DE ES FR GB GR IT LI NL SE					
	PT 92618	A	19900629 (199031)			
	AU 8947078	A	19900628 (199034)			
	CA 2006106	A	19900622 (199036)			
	DK 8906559	A	19900623 (199036)			
	JP 02212418	A	19900823 (199040)			
	ZA 8909863	A	19901031 (199048)			
	AU 635913	B	19930408 (199321)			A61K009-52
	IL 92699	A	19940826 (199435)			A61K007-16
	EP 374532	B1	19940921 (199436)	EN	20	A61K007-16
	R: AT BE CH DE ES FR GB GR IT LI NL SE					
	DE 68918419	E	19941027 (199442)			A61K007-16
	ES 2059683	T3	19941116 (199501)			A61K007-16
	IE 65813	B	19951115 (199605)			A61K007-16
	US 5500228	A	19960319 (199617)		12	A61K006-00
	JP 2901673	B2	19990607 (199928)		10	A61K009-56
	CA 2271571	A1	19900622 (199952)	EN		A61K009-52
	CA 2006106	C	19991026 (200010)	EN		A61K007-16
	CA 2271571	C	20000208 (200027)	EN		A61K009-52

ADT EP 374532 A EP 1989-121887 19891127; JP 02212418 A JP 1989-329759 19891221; ZA 8909863 A ZA 1989-9863 19891221; AU 635913 B AU 1989-47078

19891221; IL 92699 A IL 1989-92699 19891213; EP 374532 B1 EP 1989-121887 19891127; DE 68918419 E DE 1989-618419 19891127, EP 1989-121887 19891127; ES 2059683 T3 EP 1989-121887 19891127; IE 65813 B IE 1989-4146 19891221; US 5500228 A CIP of US 1987-54372 19870526, Cont of US 1988-288739 19881222, US 1990-617382 19901126; JP 2901673 B2 JP 1989-329759 19891221; CA 2271571 A1 Div ex CA 1989-2006106 19891220, CA 1989-2271571 19891220; CA 2006106 C CA 1989-2006106 19891220; CA 2271571 C Div ex CA 1989-2006106 19891220, CA 1989-2271571 19891220

FDT AU 635913 B Previous Publ. AU 8947078; DE 68918419 E Based on EP 374532; ES 2059683 T3 Based on EP 374532; US 5500228 A CIP of US 5000886; JP 2901673 B2 Previous Publ. JP 02212418

PRAI US 1988-288739 19881222; US 1987-54372 19870526; US 1990-617382 19901126

REP A3...9132; EP 184389; EP 241178; EP 244118; EP 292710; NoSR.Pub; US 4685883

IC A61K006-00; A61K007-16; A61K009-14; **A61K031-65**; A61K047-00

ICM A61K006-00; A61K007-16; A61K009-52; A61K009-56

ICS A61K009-14; A61K009-16; A61K009-22; A61K009-26; A61K009-50; **A61K031-65**; A61K038-00; A61K045-08; A61K047-00; A61K047-30

AB EP 374532 A UPAB: 20000606

Microparticles for treating dental diseases contain at least one therapeutic agent (I) dispersed in a biocompatible and biodegradable polymer (II). The particles are produced by a phase separation process and contain less than 3 weight% residual hardening agent.

USE - The particles are especially useful for treating periodontitis.

@(15pp Dwg.No.0/0)

0/0

FS CPI

FA AB; DCN

MC CPI: A09-A; A12-V01; B02-Z; B04-B04J; B04-C03B; B04-C03D; B12-A01; B12-A02C; B12-A06; B12-C01; B12-D02B; B12-D07; B12-J01; B12-L03; B12-M06; B12-M10A; D08-A05

ABEQ EP 374532 B UPAB: 19941102

Use of dry microparticles which comprise: (i) an effective amount of at least one therapeutic agent dispersed in (ii) a matrix comprising a biocompatible and biodegradable polymer, said microparticles being obtainable by a phase separation process and having a residual hardening agent content of less than 3% by weight, in the manufacture of a pharmaceutical composition consisting of said microparticles for dry alleviating dental diseases.

Dwg.0/6

ABEQ US 5500228 A UPAB: 19960428

Therapeutic agent contg. microparticles for alleviating dental disease which comprise:

(i) an effective amt. of at least one therapeutic agent dispersed in

(ii) a matrix comprising a biocompatible and biodegradable polymer,

said microparticles having been made by a phase sepn. process using a volatile silicone fluid as the sole hardening agent and having a residual volatile silicone fluid content of less than about 3% by weight.

Dwg.0/6

L88 ANSWER 10 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1990-211295 [28] WPIX

DNC C1990-091231

TI Compsns. for admin. to periodontal pocket - comprising biodegradable polymer particles containing therapeutic agent.

DC A96 B07 D21 P32 P33 P34

IN BRIZZOLARA, N S; LANZILOTTI, M G; **LAWTER, J R**

PA (AMCY) AMERICAN CYANAMID CO; (AMHP) WYETH HOLDINGS CORP

CYC 24

PI EP 374531 A 19900627 (199028)* 17

R: AT BE CH DE ES FR GB GR IT LI NL SE

PT 92614 A 19900629 (199031)

AU 8947077	A	19900628	(199034)			
NO 8905167	A	19900625	(199034)			
JP 02184620	A	19900719	(199035)			
CA 2006105	A	19900622	(199036)			
DK 8906558	A	19900623	(199036)			
ZA 8909857	A	19901031	(199048)			
AU 635912	B	19930408	(199321)			A61K009-16
US 5236355	A	19930817	(199334)		14	A61G017-02
EP 374531	B1	19940504	(199418)	EN	18	A61K007-16
R: AT BE CH DE ES FR GB GR IT LI NL SE						
DE 68915132	E	19940609	(199424)			A61K007-16
IL 92700	A	19940530	(199424)			A61K007-16
ES 2051968	T3	19940701	(199429)			A61K007-16
US 5366733	A	19941122	(199501)		12	A61K006-00
IE 63952	B	19950628	(199533)			A61K007-16
NO 178605	B	19960122	(199608)			A61K009-50
US 5622498	A	19970422	(199722)		13	A61C017-02
PH 29551	A	19960401	(199907)			A61C017-02
JP 2901674	B2	19990607	(199928)		12	A61K009-14
KR 138651	B1	19980515	(200014)			A61K009-50
KR 143912	B1	19980715	(200018)			A61K007-16
CA 2006105	C	20000314	(200032)	EN		A61K007-00
DK 174915	B	20040223	(200415)			A61K009-50

ADT EP 374531 A EP 1989-121886 19891127; JP 02184620 A JP 1989-329760 19891221; ZA 8909857 A ZA 1989-9857 19891221; AU 635912 B AU 1989-47077 19891221; US 5236355 A Div ex US 1988-289076 19881222, US 1990-593125 19901005; EP 374531 B1 EP 1989-121886 19891127; DE 68915132 E DE 1989-615132 19891127, EP 1989-121886 19891127; IL 92700 A IL 1989-92700 19891213; ES 2051968 T3 EP 1989-121886 19891127; US 5366733 A Cont of US 1988-289076 19881222, US 1991-706327 19910528; IE 63952 B IE 1989-4145 19891221; NO 178605 B NO 1989-5167 19891221; US 5622498 A Div ex US 1988-289076 19881222, Cont of US 1990-593125 19901005, US 1993-7753 19930122; PH 29551 A PH 1989-39748 19891220; JP 2901674 B2 JP 1989-329760 19891221; KR 138651 B1 KR 1989-19157 19891221; KR 143912 B1 KR 1989-19474 19891221; CA 2006105 C CA 1989-2006105 19891220; DK 174915 B DK 1989-6558 19891221

FDT AU 635912 B Previous Publ. AU 8947077; DE 68915132 E Based on EP 374531; ES 2051968 T3 Based on EP 374531; NO 178605 B Previous Publ. NO 8905167; US 5622498 A Cont of US 5236355; JP 2901674 B2 Previous Publ. JP 02184620; DK 174915 B Previous Publ. DK 8906558

PRAI US 1988-289076 19881222; US 1990-593125 19901005; US 1991-706327 19910528; US 1993-7753 19930122

REP A3...9131; EP 184389; EP 241178; EP 244118; EP 292710; NoSR.Pub; US 4515771; US 4685883; US 4701320

IC A61C003-00; A61C005-02; A61C017-00; A61C019-06; A61J003-02; A61K006-00; A61K007-16; A61K009-14; **A61K031-65**; A61K047-00; A61M031-00

ICM A61C017-02; A61G017-02; A61K006-00; A61K007-00; A61K007-16; A61K009-14; A61K009-16; A61K009-50

ICS A61C003-00; A61C005-02; A61C005-04; A61C017-00; A61C019-06; A61J003-02; A61K009-22; A61K009-26; A61K009-52; **A61K031-65**; A61K047-00; A61M005-00; A61M031-00

AB EP 374531 A UPAB: 19930928
Compsns. for local admin. to the periodontal pocket comprise dry microparticles comprising at least one therapeutic agent (I) dispersed in a biocompatible and biodegradable polymer (II).

USE/ADVANTAGE - The compsns. are useful for treating dental diseases, e.g. periodontitis and gingivitis. The microparticles are easily introduced into the periodontal pocket using a syringe-type applicator, and provide sustained release of (I), e.g. for 2 weeks.

0/6

FS CPI GMPI

FA AB; DCN

MC CPI: A09-A; A12-V01; B02-Z; B04-C03B; B04-C03D; B12-D07; B12-L03;

B12-M10A; **B12-M11G**; D08-A05

ABEQ US 5236355 A UPAB: 19931119

Appts. for dispensing oral compsn. for alleviating dental diseases by local admin. of a therapeutic agent (TA) to the periodontal pocket comprises : (1) a container having a barrel ending in a hollow delivery tip outlet adpated to fit the periodonetal pocket between the patient's gum and teeth; (2) a plunger to translate an externally applied force onto dry TA contg. microparticles (MP) contained within the outlet to disperse MP into the periodontal pocket.

The plunger comprises a rod with a solid tip which is partially inserted into the outlet. The MPs comprise at least one TA dispersed in a biocompatible and biodegradable polymer. The MPs are made by phase sepn. process using volatile silicone fluid and have residual volatile silicone content of less than 3 wt.%.

USE - For treating dental disease.

Dwg.6a,6b/6

ABEQ EP 374531 B UPAB: 19940622

Delivery system for local adminstration of a therapeutic agent to the periodontal pocket of a patient, comprising in combination: (A) dry microparticles having (a) an effective amount of at least one therapeutic agent dispersed in (b) a matrix comprising a biocompatible and biodegradable polymer; and (B) an apparatus having (a) a container ending in outlet means adapted to fit the periodontal pocket between the patient's gum and teeth, said outlet means containing said dry microparticles; and (b) means to translate an externally applied force onto said microparticles contained within the outlet means so as to dispense them through the tip of said outlet means into said periodontal pocket.

Dwg.6/6

ABEQ US 5366733 A UPAB: 19950110

An oral compsn. adapted for local admin. of a therapeutic agent to the periodontal pocket over an extended period of time comprises dry discrete microparticles composed of therapeutic agent and matrix in a **microcapsule** prepd. by a phase sepn. process and having residual hardening agent content below 3 wt.%.

Agents include antibacterials, antibiotics, antifungals, antiinflammatories, immunosuppressives, immunostimulants, dental desensitiser, odour masker, immune reagent, anaesthetics, antiseptic, nutrients, antioxidants, lipopolysaccharides, peroxide, tissue growth factors or mixt. Esp. **tetracyclines.** particle diam. is 0.1-1000(30-120)microns. Phase sepn. agent is pref. volatile silicone fluid. Therapeutic agent is 0.00001-50 pts./100 pts. wt. microparticle. The compsn. is admin. between gum and tooth.

Pref. matrix polymer is polyglycolide or poly(1-lactide), which becomes tacky on contact with water.

USE/ADVANTAGE - Treatment of periodontal disease. Duration of action is up to 14 days.

Dwg.6/6

ABEQ US 5622498 A UPAB: 19970530

Apparatus for dispensing an oral composition for alleviating dental diseases by local administration of a therapeutic agent to the periodontal pocket of a patient in need of such treatment, said apparatus comprising:

(1) a container having barrel means ending in a hollow delivery tip outlet means adapted to fit the periodontal pocket between the patient's gum and teeth;

(2) plunger means to translate an externally applied force onto dry therapeutic agent containing microparticles contained within the outlet means so as to dispense them through said outlet means tip into said periodontal pocket said plunger means comprising a rod with a solid tip which is partially inserted into said outlet means; and in said outlet means,

(3) said dry microparticles comprising:

(i) an effective amount of at least one therapeutic agent dispersed

in a dry matrix comprising a biocompatible and biodegradable polymer.
Dwg.6b/7

L88 ANSWER 11 OF 11 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1988-339310 [48] WPIX
CR 1990-211296 [28]
DNC C1988-149923
TI Phase separation **microencapsulation** - using volatile silicone fluid as hardening agent to produce **microcapsules** with low residual hardening agent content.
DC A96 B07 P33
IN LANZILOTTI, M G; **LAWTER, J R**
PA (AMCY) AMERICAN CYANAMID CO
CYC 23
PI EP 292710 A 19881130 (198848)* EN 8
R: AT BE CH DE ES FR GB GR IT LI NL SE
AU 8816592 A 19881201 (198904)
JP 63307813 A 19881215 (198905)
NO 8802277 A 19881219 (198905)
DK 8802850 A 19881127 (198908)
ZA 8803737 A 19890222 (198915)
US 5000886 A 19910319 (199114) 6
EP 292710 B 19920102 (199202)
R: AT BE CH DE ES FR GB GR IT LI NL SE
DE 3867313 G 19920213 (199208)
IL 86274 A 19920329 (199218)
US 5143661 A 19920901 (199238) 7 A61K009-50
ES 2038236 T3 19930716 (199333) B01J013-02
CA 1330533 C 19940705 (199431) B01J013-06
DK 169119 B 19940822 (199432) A61K009-50
NO 177984 B 19950925 (199544) A61K009-50
PH 27019 A 19930201 (199635) A61K000-00
JP 2712101 B2 19980210 (199811) 6 A61K009-50
BR 1100810 A3 19980512 (199828) A61K009-50
KR 9701209 B1 19970204 (199933) A61K009-52
ADT EP 292710 A EP 1988-106617 19880518; JP 63307813 A JP 1988-126021 19880525; ZA 8803737 A ZA 1988-3737 19880525; US 5000886 A US 1987-54372 19870526; US 5143661 A Cont of US 1987-54372 19870526, US 1990-602414 19901022; ES 2038236 T3 EP 1988-106617 19880518; CA 1330533 C CA 1988-567503 19880524; DK 169119 B DK 1988-2850 19880525; NO 177984 B NO 1988-2277 19880525; PH 27019 A PH 1988-36977 19880526; JP 2712101 B2 JP 1988-126021 19880525; BR 1100810 A3 BR 1997-1100810 19970512; KR 9701209 B1 KR 1988-6203 19880526
FDT US 5143661 A Cont of US 5000886; ES 2038236 T3 Based on EP 292710; DK 169119 B Previous Publ. DK 8802850; NO 177984 B Previous Publ. NO 8802277; JP 2712101 B2 Previous Publ. JP 63307813
PRAI US 1987-54372 19870526; US 1990-602414 19901022
REP A3...8912; FR 2166062; FR 2491351; No-SR.Pub
IC ICM A61K000-00; A61K009-50; A61K009-52; B01J013-02; B01J013-06
ICS A61J003-07; A61K037-43; A61K038-09; A61K047-30; B01J013-12
AB EP 292710 A UPAB: 19960503
A process for preparing a pharmaceutical compsn. in **microcapsule** form comprises (a) dispersing a solution containing a core material comprising a pharmaceutical agent in an organic solvent containing a biocompatible **encapsulating** polymer (I), (b) adding to the dispersion a non-solvent for (I) and the core material and (c) adding the prod. to a hardening solvent (II) to extract the organic solvent and produce solid **microcapsules**, characterised by using as (II) a volatile silicone fluid (IIa). The core material may be e.g. **tetracycline**, doxycykline, declomycin, cephalosporin or penicillin.
ADVANTAGE - (IIa) have very low toxicity and are non-flammable and the **microcapsules** obtd. have a very low residual hardening agent

content.
0/0
Dwg.0/0
FS CPI GMPI
FA AB; DCN
MC CPI: A06-A00E3; A12-V01; A12-W05; B04-B02D4; B04-C03D; B05-B01B; B12-M11E
ABEQ EP 292710 B UPAB: 19930923
A process for preparing a pharmaceutical composition in **microcapsule** form, the process comprising: (a) dispersing a solution containing a core material which is comprised of a pharmaceutical agent in an organic solvent containing a biocompatible **encapsulating** polymer; (b) adding to the dispersion a non-solvent for the **encapsulating** polymer and core material; and (c) adding the product of step (b) to a hardening solvent to extract the organic solvent and produce solid **microcapsules** of the pharmaceutical composition, characterised by using as the hardening solvent a volatile silicone fluid.
ABEQ US 5000886 A UPAB: 19930923
New process for prepn. silicone-hardened **microencapsulated** pharmaceuticals comprises dispersing soln. of drug core material in organic solvent contg. biocompatible **encapsulating** polymer; addn. non-solvent for polymer and core material which is miscible in organic solvent; then addn. prod. to hardening solvent to extract organic solvent and produce solid **microcapsules.** Improvement comprises using volatile silicone fluid (e.g. octamethyl-cyclotetrasiloxane) as hardening solvent. **Encapsulating** polymer may separate from soln. as liq. phase and coat core particles. Non-solvent may be 2nd. polymer incompatible with **encapsulating** polymer. Biocompatible **encapsulating** polymer is pref. biodegradable.
USE - Applicable to vitamins (e.g. B-12), antibiotics (e.g. **tetracyclins**, cephalosporins, penicillin, quinolone, peptides, LHRH (esp. Trp6-LH-RH), aneasthetics (procaine, tetracaine. etc.).
ABEQ US 5143661 A UPAB: 19930923
In a compsn. comprising a **microencapsulated** pharmaceutical agent the **microcapsules** are prepd. by phase sepn. **microencapsulation** using a volatile silicone (I) as hardening agent. The **microcapsules** comprise the pharmaceutical agent (II) **encapsulating** polymer and (I).
Pref. (II) is (D-Trp6)-LH-RH. The residual content of (I) is pref. less than 1 wt.%. (I) is pref. octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane or hexamethyldisiloxane.
ADVANTAGE - As alkane hardening agents are not used problems of inflammability in prodn. and toxicity in use are avoided.
0/0

=> d his

(FILE 'HOME' ENTERED AT 14:26:22 ON 29 MAY 2004)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 14:26:43 ON 29 MAY 2004
E TETRACYCLINE/CN
L1 1 S E3
E 5391.6/RID
L2 6300 S E5
L3 14442 S E3 NOT L2
L4 1165 S ?TETRACYCLIN?/CNS
L5 21383 S L1,L2,L3,L4

FILE 'HCAPLUS' ENTERED AT 14:27:57 ON 29 MAY 2004
L6 59115 S L5
L7 31620 S ?TETRACYCLIN?

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L8        66986 S L6,L7
L9            1 S US20040029843/PN OR (US2003-601259# OR WO2003-US19686 OR US20
                E LAWTER J/AU
L10          22 S E4-E7
                E ORAPHARM/PA,CS
L11           3 S E5-E10
L12           6 S L8 AND L9-L11

     FILE 'HCAPLUS' ENTERED AT 14:31:38 ON 29 MAY 2004
                E DRUG DELIVERY/CT
L13         933 S E119
L14         390 S E146
                E E6+ALL
L15        1494 S E3-E5 AND L8
L16        4476 S E2+NT AND L8
L17        5918 S L13-L16
L18          69 S L17 AND (MOUTHWASH? OR MOUTHRINS? OR (MOUTH OR ORAL? OR BUCCA
                E MOUTH/CT
L19          26 S E27 AND L8
L20          39 S E61+OLD,NT,PFT AND L8
L21           1 S E65 AND L8
L22           4 S GARGL? AND L8
L23         210 S SALIVA? AND L8
L24         116 S L18-L23 AND L17
L25         134 S L18-L22,L24
L26         134 S L24,L25
L27         131 S L26 NOT L12
L28          34 S L27 AND ?TABLET?
L29          27 S L27 AND LOZENG?
L30          18 S L27 AND (DISINTEGRAT? OR DISOLV? OR DISSOLV? OR DISOLUTION? O
L31          52 S L28-L30
                SEL DN AN 10 24 26 34 39 40 44 45 48 51 52
L32          11 S E1-E33
L33          11 S L32 AND L6-L32
L34         277 S L8 AND L18-L26
L35         274 S L34 NOT L12
L36          78 S L35 AND (?LOZENG? OR ?TROCHE? OR ?TABLET? OR ?CAPSUL? OR ?RIN
L37          41 S L36 NOT L31
                SEL DN AN 5
L38           1 S L37 AND E34-E36
L39          12 S L33,L38
L40          11 S L39 AND L8
L41           1 S L39 NOT L40
                E DISSOLUTION/CT
                E E7+ALL
L42         257 S E1,E2 AND L8
                E DISSOLUTION/CT
                E E3+ALL
L43         143 S E2,E1 AND L8
                E E17+AL
                E E3+ALL
L44          74 S E3-E5,E2+NT AND L8
L45           1 S E26+OLD,NT,PFT AND L8
L46          37 S E27+OLD,NT,PFT AND L8
                E DISINTEGRATION/CT
L47           0 S E3 AND L8
                E E3+ALL
L48          13 S E2+OLD,NT,PFT AND L8
L49         372 S L42-L48
L50          31 S L49 AND (MOUTH? OR ?PASTE? OR ?LOZENG? OR ?TROCHE? OR ?RINS?
L51          11 S L40 AND L6-L50
L52          10 S L51 AND (MOUTH? OR ?PASTE? OR ?LOZENG? OR ?TROCHE? OR ?RINS?
L53           1 S L51 NOT L52
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L54          11 S L51-L53 NOT L12

     FILE 'WPIX' ENTERED AT 15:03:30 ON 29 MAY 2004
                 E LAWTER J/AU
L55          16 S E3,E4
                 E ORAPHARMA/PA
L56           3 S E3,E4
L57        3432 S L7/BIX
L58          31 S (?TETRA CYCLIN?)/BIX
                 E TETRACYCLIN/DCN
                 E E4+ALL
L59        1023 S E2 OR 0210/DRN
L60         406 S E4
L61         102 S E6
L62        3048 S (B02-T OR C02-T)/MC
L63        2387 S V201/M0,M1,M2,M3,M4,M5,M6
L64        5832 S L57-L63
L65           6 S L55,L56 AND L64
L66         611 S R111/M0,M1,M2,M3,M4,M5,M6 AND L64
L67         139 S L66 AND (B12-M11? OR C12-M11?)/MC
L68          98 S L66 AND R038/M0,M1,M2,M3,M4,M5,M6
L69         131 S L66 AND (R033 OR R034 OR R036)/M0,M1,M2,M3,M4,M5,M6
L70         206 S L67-L69
L71         762 S A61K031-65/IC,ICM,ICS
L72        6121 S L71,L64
L73           6 S L55,L56 AND L72
L74         633 S L72 AND R111/M0,M1,M2,M3,M4,M5,M6
L75         144 S L74 AND (B12-M11? OR C12-M11?)/MC
L76         182 S L74 AND (R038 OR R033 OR R034 OR R036)/M0,M1,M2,M3,M4,M5,M6
L77         214 S L70,L75,L76
L78          22 S L77 AND (MOUTH? OR ?GARGL? OR ?PASTE? OR ?LOZENG? OR ?TROCHE?
L79          21 S L78 NOT L73
                 SEL DN AN 7 11 14
L80           3 S L79 AND E1-E7
L81           9 S L73,L80
L82          32 S L72 AND SALIVA?/BIX
L83          30 S L82 NOT L81
                 SEL DN AN 20 24
L84           2 S L83 AND E8-E11
L85          11 S L81,L84 AND L55-L84
L86           9 S L85 AND (SALIVA? OR MOUTH? OR ?TROCHE? OR ?LOZENG? OR ?TABLET
L87           2 S L85 NOT L86
L88          11 S L86,L87

     FILE 'WPIX' ENTERED AT 15:27:14 ON 29 MAY 2004

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